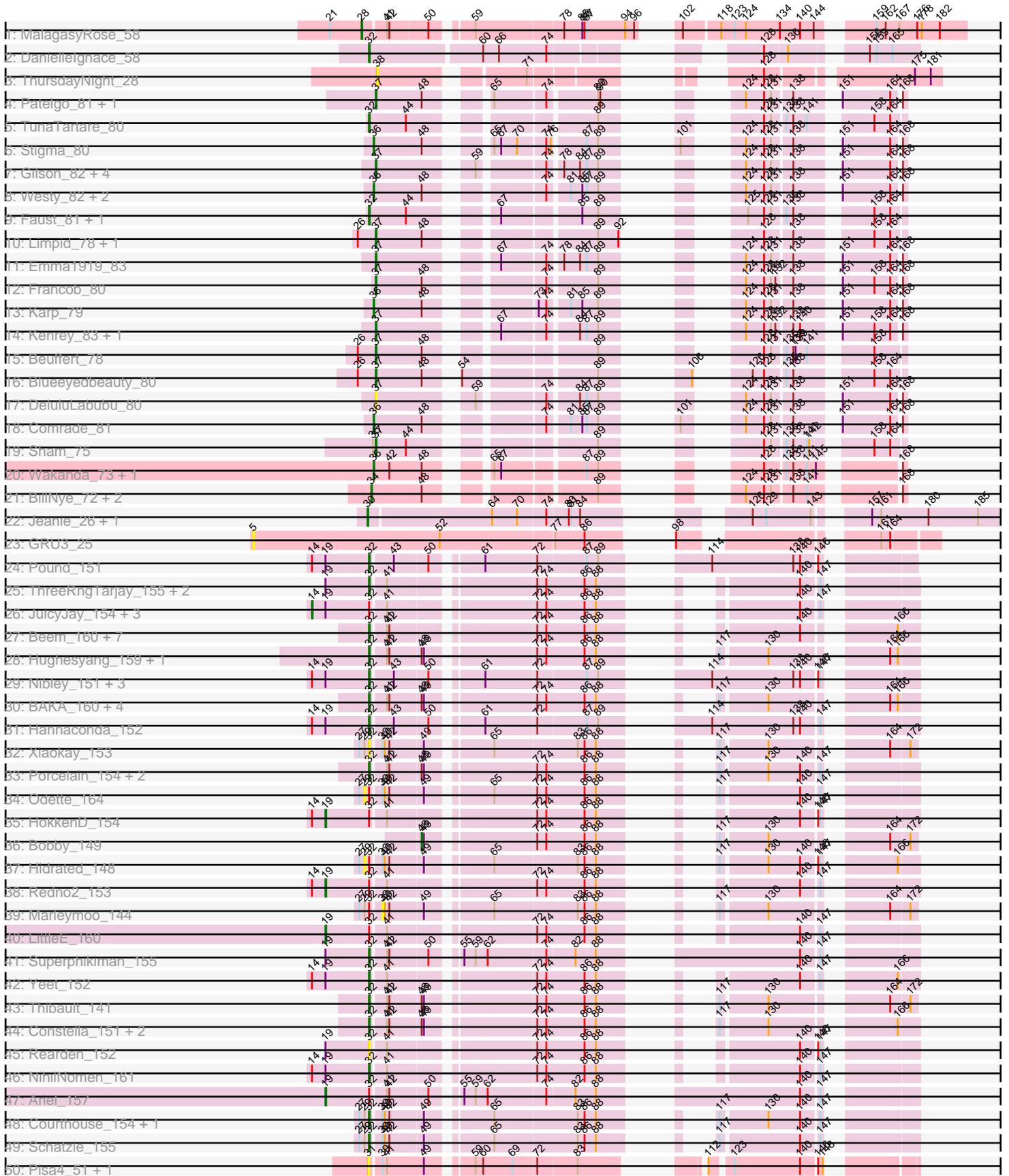
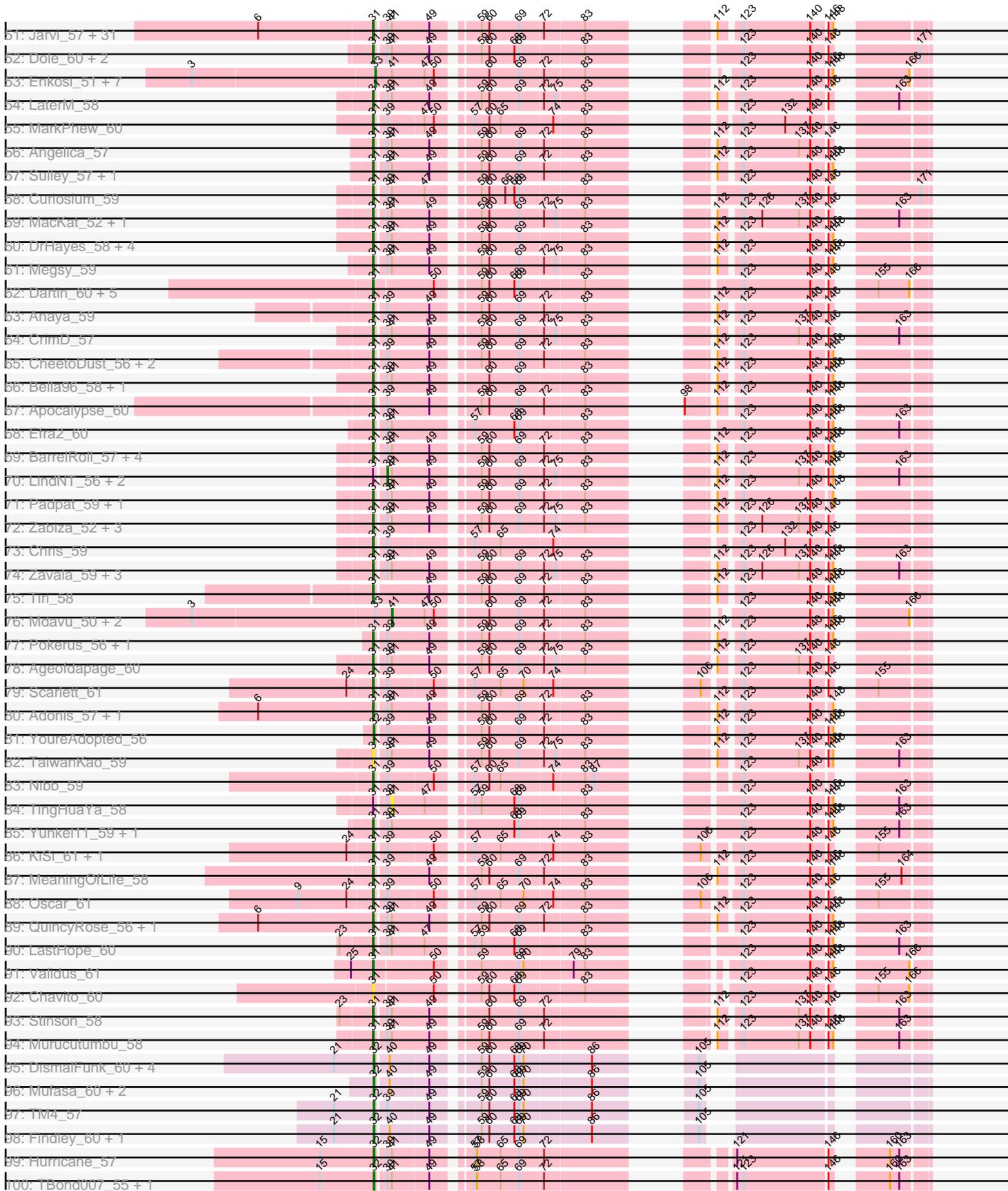


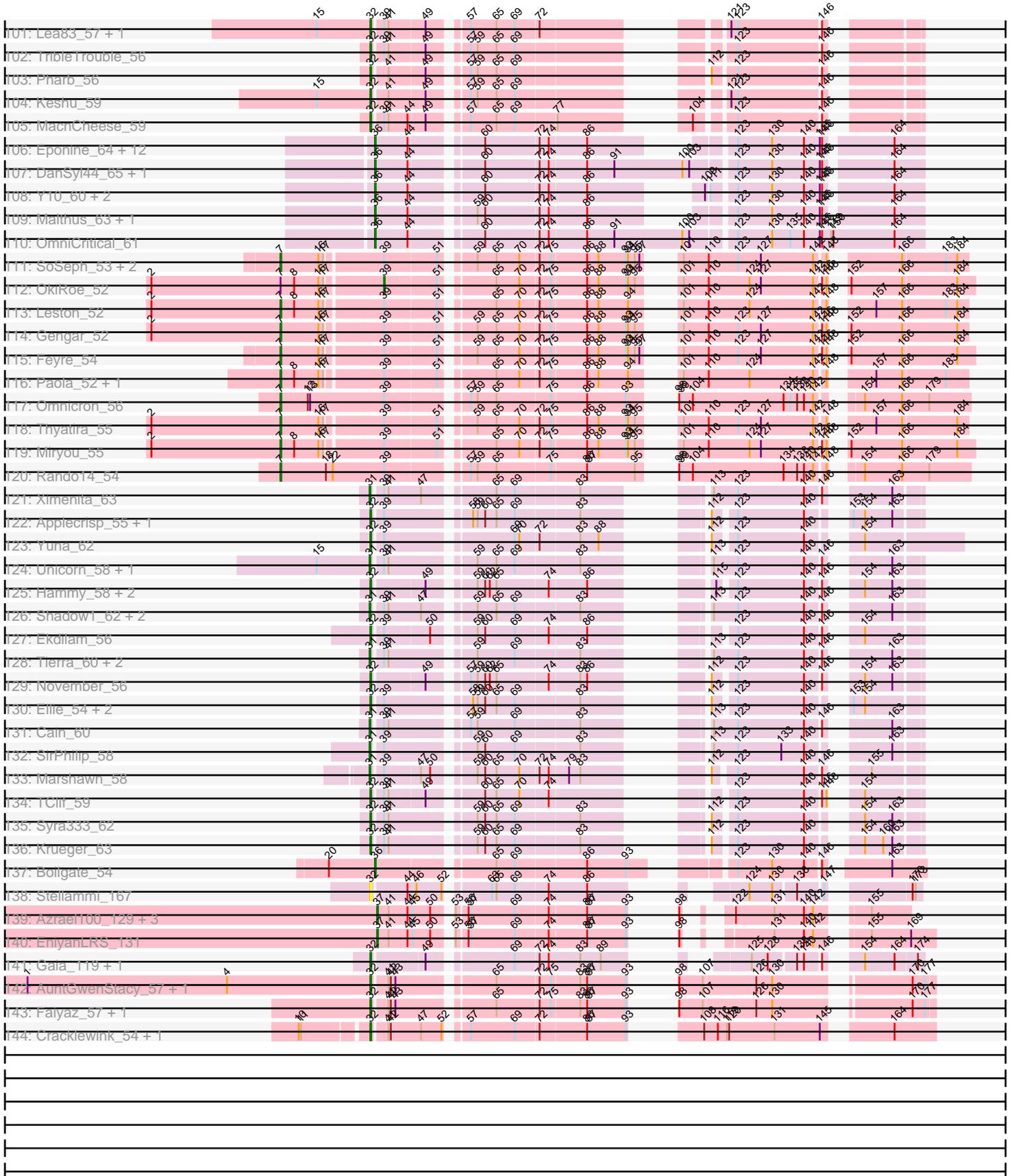
Pham 281923



Pham 281923



Pham 281923



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 281923 Report

This analysis was run 02/23/26 on database version 636.

Pham number 281923 has 303 members, 35 are drafts.

Phages represented in each track:

- Track 1 : MalagasyRose_58
- Track 2 : DanielleIgnace_58
- Track 3 : ThursdayNight_28
- Track 4 : Patelgo_81, Moab_81
- Track 5 : TunaTartare_80
- Track 6 : Stigma_80
- Track 7 : Gilson_82, Forrest_84, Jada_82, MeganTheeKilla_80, Maupel_81
- Track 8 : Westy_82, Belfort_83, SparkleGoddess_81
- Track 9 : Faust_81, SeresaTree_81
- Track 10 : Limpid_78, Annadreamy_79
- Track 11 : Emma1919_83
- Track 12 : Francob_80
- Track 13 : Karp_79
- Track 14 : Kenrey_83, Phredrick_81
- Track 15 : Beuffert_78
- Track 16 : Blueeyedbeauty_80
- Track 17 : DeluluLabubu_80
- Track 18 : Comrade_81
- Track 19 : Sham_75
- Track 20 : Wakanda_73, Muntaha_74
- Track 21 : BillNye_72, Circinus_73, Chaewon_76
- Track 22 : Jeanie_26, McGonagall_26
- Track 23 : GRU3_25
- Track 24 : Pound_151
- Track 25 : ThreeRngTarjay_155, Gonephishing_152, Nekros_156
- Track 26 : JuicyJay_154, Phoebus_160, Dove_146, Bombitas_146
- Track 27 : Beem_160, Dallas_159, Minerva_158, Wanda_158, Ejimix_151, Halley_160, DmpstrDiver_159, Zelink_153
- Track 28 : Hughesyang_159, Klein_158
- Track 29 : Nibley_151, KashFlow_157, BronnyJames_152, Shaboozey_155
- Track 30 : BAKA_160, Optimus_151, Duke13_157, Kalah2_151, Bagrid_163
- Track 31 : Hannaconda_152
- Track 32 : Xiaokay_153
- Track 33 : Porcelain_154, MiaZeal_157, Lucky2013_150
- Track 34 : Odette_164
- Track 35 : HokkenD_154
- Track 36 : Bobby_149

- Track 37 : Hidrated_148
- Track 38 : Redno2_153
- Track 39 : Marleymoo_144
- Track 40 : LittleE_160
- Track 41 : Superphikiman_155
- Track 42 : Yeet_152
- Track 43 : Thibault_141
- Track 44 : Constella_151, Omega_164, EricMillard_153
- Track 45 : Rearden_152
- Track 46 : NihilNomen_161
- Track 47 : Ariel_157
- Track 48 : Courthouse_154, Squint_151
- Track 49 : Schatzie_155
- Track 50 : Pisa4_51, Pisa1_57
- Track 51 : Jarvi_57, Peel_57, CREW_57, Topper_57, Boiiii_57, ShiaSurprise_58, Dalmuri_57, Asayake_57, Hyperbowlee_57, BGlluviae_57, Jeckyll_57, Homura_57, AlishaPH_57, Atiba_58, BEEEST_57, Rosmarinus_57, Padfoot_57, Joy99_57, Inky_57, Lunahalos_57, Capricorn_57, Blizzard_57, Belladonna_57, CallaLilly_57, Adephagia_57, Durfee_57, Tachez_57, Spock_57, Twitch_57, Piatt_57, Llorens_57, CaseJules_59
- Track 52 : Dole_60, Illumine_60, Devera_62
- Track 53 : Enkosi_51, Teejan_51, Nutello_49, LilPharaoh_49, Amelie_49, Torres_52, Binglebops_49, Trice_49
- Track 54 : LaterM_58
- Track 55 : MarkPhew_60
- Track 56 : Angelica_57
- Track 57 : Sulley_57, Beezoo_59
- Track 58 : Curiosium_59
- Track 59 : MacKat_52, Clipper_60
- Track 60 : DrHayes_58, Anma_59, Urkel_58, SamuelLPlaqson_58, TiniBug_58
- Track 61 : Megsy_59
- Track 62 : Dartin_60, Peanam_60, Shaobing_60, McMater_60, Richo_60, Niklas_60
- Track 63 : Anaya_59
- Track 64 : CrimD_57
- Track 65 : CheetoDust_56, Bern_58, BaghaKamala_56
- Track 66 : Bella96_58, DartGoblin_60
- Track 67 : Apocalypse_60
- Track 68 : Efra2_60
- Track 69 : BarrelRoll_57, Slimphazie_57, TruffulaTree_57, Jayhawk_58, Rapunzel97_58
- Track 70 : LindNT_56, TreyKay_58, Prithvi_58
- Track 71 : Padpat_59, Emerson_58
- Track 72 : Zabiza_52, ActinUp_57, HedwigODU_57, Ramen_58
- Track 73 : Chris_59
- Track 74 : Zavala_59, JAWS_57, Mynx_58, Veliki_58
- Track 75 : Tiri_58
- Track 76 : Mdavu_50, Nikao_52, SgtBeansprout_49
- Track 77 : Pokerus_56, Geraldini_60
- Track 78 : Ageofdapage_60
- Track 79 : Scarlett_61
- Track 80 : Adonis_57, Deby_57
- Track 81 : YoureAdopted_56
- Track 82 : TaiwanKao_59

- Track 83 : Nibb_59
- Track 84 : TingHuaYa_58
- Track 85 : Yunkel11_59, Guanica15_59
- Track 86 : KiSi_61, LeMond_61
- Track 87 : MeaningOfLife_58
- Track 88 : Oscar_61
- Track 89 : QuincyRose_56, Ganymede_58
- Track 90 : LastHope_60
- Track 91 : Validus_61
- Track 92 : Chavito_60
- Track 93 : Stinson_58
- Track 94 : Murucutumbu_58
- Track 95 : DismalFunk_60, Marcoliusprime_60, ZoeJ_59, Milly_60, DismalStressor_60
- Track 96 : Mufasa_60, Doughnut_60, BoostSeason_60
- Track 97 : TM4_57
- Track 98 : Findley_60, Strobilo_61
- Track 99 : Hurricane_57
- Track 100 : TBond007_55, Pixie_56
- Track 101 : Lea83_57, ShedlockHolmes_58
- Track 102 : TripleTrouble_56
- Track 103 : Pharb_56
- Track 104 : Keshu_59
- Track 105 : MacnCheese_59
- Track 106 : Eponine_64, Ruthiejr_63, Cheetobro_62, Taquito_61, Juliette_64, YasnayaPolyana_61, Fionnbharth_62, Slarp_62, Mitti_62, Wintermute_62, Qhanda_64, SamScheppers_60, Chancellor_62
- Track 107 : DanSyl44_65, Lebo14_61
- Track 108 : Y10_60, Y2_60, JF1_62
- Track 109 : Malthus_63, Kraw_62
- Track 110 : OmniCritical_61
- Track 111 : SoSeph_53, Heftyboy_53, Waterfoul_54
- Track 112 : OkiRoe_52
- Track 113 : Leston_52
- Track 114 : Gengar_52
- Track 115 : Feyre_54
- Track 116 : Paola_52, Guillsminger_53
- Track 117 : Omnicron_56
- Track 118 : Thyatira_55
- Track 119 : Miryou_55
- Track 120 : Rando14_54
- Track 121 : Ximenita_63
- Track 122 : Applecrisp_55, Fefferhead_56
- Track 123 : Yuna_62
- Track 124 : Unicorn_58, PhelpsODU_58
- Track 125 : Hammy_58, Amohnition_58, DarthP_58
- Track 126 : Shadow1_62, Sunflower1121_63, Tigress9_65
- Track 127 : Ekdilam_56
- Track 128 : Tierra_60, Bryler_60, Phrank_60
- Track 129 : November_56
- Track 130 : Ellie_54, Amgine_57, Lavahound_58
- Track 131 : Cain_60
- Track 132 : SirPhilip_58

- Track 133 : Marshawn_58
- Track 134 : TClif_59
- Track 135 : Syra333_62
- Track 136 : Krueger_63
- Track 137 : Boilgate_54
- Track 138 : Stellammi_167
- Track 139 : Azrael100_129, MaryV_122, Cosmo_137, Wildcat_136
- Track 140 : EniyanLRS_131
- Track 141 : Gaia_119, Nebkiss_120
- Track 142 : AuntGwenStacy_57, Typha_56
- Track 143 : Faiyaz_57, Hilltopfarm_56
- Track 144 : Cracklewink_54, Bipper_54

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

The start number called the most often in the published annotations is 31, it was called in 106 of the 268 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_57, Adephegia_57, Adonis_57, Ageofdapage_60, AlishaPH_57, Anaya_59, Angelica_57, Anma_59, Apocalypse_60, Asayake_57, Atiba_58, BEEST_57, BGIlluviae_57, BaghaKamala_56, BarrelRoll_57, Beezoo_59, Bella96_58, Belladonna_57, Bern_58, Blizzard_57, Boiiii_57, Bryler_60, CREW_57, Cain_60, CallaLilly_57, Capricorn_57, CaseJules_59, Chavito_60, CheetoDust_56, Chris_59, Clipper_60, CrimD_57, Curiosium_59, Dalmuri_57, DartGoblin_60, Dartin_60, Deby_57, Devera_62, Dole_60, DrHayes_58, Durfee_57, Efra2_60, Emerson_58, Ganymede_58, Geraldini_60, Guanica15_59, HedwigODU_57, Homura_57, Hyperbowlee_57, Illumine_60, Inky_57, JAWS_57, Jarvi_57, Jayhawk_58, Jeckyll_57, Joy99_57, KiSi_61, LastHope_60, LaterM_58, LeMond_61, Llorens_57, Lunahalos_57, MacKat_52, MarkPhew_60, Marshawn_58, McMater_60, MeaningOfLife_58, Megsy_59, Murucutumbu_58, Mynx_58, Nibb_59, Niklas_60, Oscar_61, Padfoot_57, Padpat_59, Peanam_60, Peel_57, PhelpsODU_58, Phrank_60, Piatt_57, Pisa1_57, Pisa4_51, Pokerus_56, QuincyRose_56, Ramen_58, Rapunzel97_58, Richo_60, Rosmarinus_57, SamuelLPlaqson_58, Scarlett_61, Shadow1_62, Shaobing_60, ShiaSurprise_58, SirPhilip_58, Slimphazie_57, Spock_57, Stinson_58, Sulley_57, Sunflower1121_63, Tachez_57, TaiwanKao_59, Tierra_60, Tigress9_65, TiniBug_58, Tiri_58, Topper_57, TruffulaTree_57, Twitch_57, Unicorn_58, Urkel_58, Validus_61, Veliki_58, Ximenita_63, Yunkel11_59, Zabiza_52, Zavala_59,

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

- LindNT_56, Prithvi_58, TingHuaYa_58, TreyKay_58,

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

- Amelie_49, Amgine_57, Amohnition_58, Annadreamy_79, Applecrisp_55, Ariel_157, AuntGwenStacy_57, Azrael100_129, BAKA_160, Bagrid_163, Beem_160, Belfort_83, Beuffert_78, Binglebops_49, BillNye_72, Bipper_54, Blueeyedbeauty_80, Bobby_149, Boilgate_54, Bombitas_146, BoostSeason_60, BronnyJames_152, Chaewon_76, Chancellor_62, Cheetobro_62, Circinus_73, Comrade_81, Constella_151, Cosmo_137, Courthouse_154, Cracklewink_54, Dallas_159, DanSyl44_65,

DanielleIgnace_58, DarthP_58, DeluluLabubu_80, DismalFunk_60, DismalStressor_60, DmpstrDiver_159, Doughnut_60, Dove_146, Duke13_157, Ejimix_151, Ekdilam_56, Ellie_54, Emma1919_83, EniyanLRS_131, Enkosi_51, Eponine_64, EricMillard_153, Faiyaz_57, Faust_81, Fefferhead_56, Feyre_54, Findley_60, Fionnbharth_62, Forrest_84, Francob_80, GRU3_25, Gaia_119, Gengar_52, Gilson_82, Gonephishing_152, Guillsminger_53, Halley_160, Hammy_58, Hannaconda_152, Heftyboy_53, Hidrated_148, Hilltopfarm_56, HokkenD_154, Hughesyang_159, Hurricane_57, JF1_62, Jada_82, Jeanie_26, JuicyJay_154, Juliette_64, Kalah2_151, Karp_79, KashFlow_157, Kenrey_83, Keshu_59, Klein_158, Kraw_62, Krueger_63, Lavahound_58, Lea83_57, Lebo14_61, Leston_52, LilPharaoh_49, Limpid_78, LittleE_160, Lucky2013_150, MacnCheese_59, MalagasyRose_58, Malthus_63, Marcoliusprime_60, Marleymoo_144, MaryV_122, Maupel_81, McGonagall_26, Mdavu_50, MeganTheeKilla_80, MiaZeal_157, Milly_60, Minerva_158, Miryou_55, Mitti_62, Moab_81, Mufasa_60, Muntaha_74, Nebkiss_120, Nekros_156, Nibley_151, NihilNomen_161, Nikao_52, November_56, Nutello_49, Odette_164, OkiRoe_52, Omega_164, OmniCritical_61, Omnicron_56, Optimus_151, Paola_52, Patelgo_81, Pharb_56, Phoebus_160, Phredrick_81, Pixie_56, Porcelain_154, Pound_151, Qhanda_64, Rando14_54, Rearden_152, Redno2_153, Ruthiejr_63, SamScheppers_60, Schatzie_155, SeresaTree_81, SgtBeansprout_49, Shaboozey_155, Sham_75, ShedlockHolmes_58, Slarp_62, SoSeph_53, SparkleGoddess_81, Squint_151, Stellammi_167, Stigma_80, Strobilo_61, Superphikiman_155, Syra333_62, TBond007_55, TClif_59, TM4_57, Taquito_61, Teejan_51, Thibault_141, ThreeRngTarjay_155, ThursdayNight_28, Thyatira_55, Torres_52, TribbleTrouble_56, Trice_49, TunaTartare_80, Typha_56, Wakanda_73, Wanda_158, Waterfoul_54, Westy_82, Wildcat_136, Wintermute_62, Xiaokay_153, Y10_60, Y2_60, YasnayaPolyana_61, Yeet_152, YoureAdopted_56, Yuna_62, Zelink_153, ZoeJ_59,

Summary by start number:

Start 5:

- Found in 1 of 303 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GRU3_25 (CW2),

Start 7:

- Found in 13 of 303 (4.3%) of genes in pham
- Manual Annotations of this start: 12 of 268
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Feyre_54 (K5), Gengar_52 (K5), Guillsminger_53 (K5), Heftyboy_53 (K5), Leston_52 (K5), Miryou_55 (K5), Omnicron_56 (K5), Paola_52 (K5), Rando14_54 (K5), SoSeph_53 (K5), Thyatira_55 (K5), Waterfoul_54 (K5),

Start 14:

- Found in 14 of 303 (4.6%) of genes in pham
- Manual Annotations of this start: 4 of 268
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Bombitas_146 (J), Dove_146 (J), JuicyJay_154 (J), Phoebus_160 (J),

Start 19:

- Found in 21 of 303 (6.9%) of genes in pham
- Manual Annotations of this start: 4 of 268
- Called 19.0% of time when present
- Phage (with cluster) where this start called: Ariel_157 (J), HokkenD_154 (J), LittleE_160 (J), Redno2_153 (J),

Start 28:

- Found in 1 of 303 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 268
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MalagasyRose_58 (AG),

Start 29:

- Found in 7 of 303 (2.3%) of genes in pham
- No Manual Annotations of this start.
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Hidrated_148 (J), Odette_164 (J),

Start 30:

- Found in 2 of 303 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 268
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jeanie_26 (CW1), McGonagall_26 (CW1),

Start 31:

- Found in 120 of 303 (39.6%) of genes in pham
- Manual Annotations of this start: 106 of 268
- Called 96.7% of time when present
- Phage (with cluster) where this start called: ActinUp_57 (K1), Adephagia_57 (K1), Adonis_57 (K1), Ageofdapage_60 (K1), AlishaPH_57 (K1), Anaya_59 (K1), Angelica_57 (K1), Anma_59 (K1), Apocalypse_60 (K1), Asayake_57 (K1), Atiba_58 (K1), BEEST_57 (K1), BGlluviae_57 (K1), BaghaKamala_56 (K1), BarrelRoll_57 (K1), Beezoo_59 (K1), Bella96_58 (K1), Belladonna_57 (K1), Bern_58 (K1), Blizzard_57 (K1), Boiiii_57 (K1), Bryler_60 (K6), CREW_57 (K1), Cain_60 (K6), CallaLilly_57 (K1), Capricorn_57 (K1), CaseJules_59 (K1), Chavito_60 (K1), CheetoDust_56 (K1), Chris_59 (K1), Clipper_60 (K1), CrimD_57 (K1), Curiosium_59 (K1), Dalmuri_57 (K1), DartGoblin_60 (K1), Dartin_60 (K1), Deby_57 (K1), Devera_62 (K1), Dole_60 (K1), DrHayes_58 (K1), Durfee_57 (K1), Efra2_60 (K1), Emerson_58 (K1), Ganymede_58 (K1), Geraldini_60 (K1), Guanica15_59 (K1), HedwigODU_57 (K1), Homura_57 (K1), Hyperbowlee_57 (K1), Illumine_60 (K1), Inky_57 (K1), JAWS_57 (K1), Jarvi_57 (K1), Jayhawk_58 (K1), Jeckyll_57 (K1), Joy99_57 (K1), KiSi_61 (K1), LastHope_60 (K1), LaterM_58 (K1), LeMond_61 (K1), Llorens_57 (K1), Lunahalos_57 (K1), MacKat_52 (K1), MarkPhew_60 (K1), Marshawn_58 (K6), McMater_60 (K1), MeaningOfLife_58 (K1), Megsy_59 (K1), Murucutumbu_58 (K1), Mynx_58 (K1), Nibb_59 (K1), Niklas_60 (K1), Oscar_61 (K1), Padfoot_57 (K1), Padpat_59 (K1), Peanam_60 (K1), Peel_57 (K1), PhelpsODU_58 (K6), Phrank_60 (K6), Piatt_57 (K1), Pisa1_57 (K1), Pisa4_51 (K1), Pokerus_56 (K1), QuincyRose_56 (K1), Ramen_58 (K1), Rapunzel97_58 (K1), Richo_60 (K1), Rosmarinus_57 (K1), SamuelLPlaqson_58 (K1), Scarlett_61 (K1), Shadow1_62 (K6), Shaobing_60 (K1), ShiaSurprise_58 (K1), SirPhilip_58 (K6), Slimphazie_57 (K1), Spock_57 (K1), Stinson_58 (K1), Sulley_57 (K1), Sunflower1121_63 (K6), Tachez_57 (K1), TaiwanKao_59 (K1), Tierra_60 (K6),

Tigress9_65 (K6), TiniBug_58 (K1), Tiri_58 (K1), Topper_57 (K1), TruffulaTree_57 (K1), Twitch_57 (K1), Unicorn_58 (K6), Urkel_58 (K1), Validus_61 (K1), Veliki_58 (K1), Ximenita_63 (K6), Yunkel11_59 (K1), Zabiza_52 (K1), Zavala_59 (K1),

Start 32:

- Found in 98 of 303 (32.3%) of genes in pham
- Manual Annotations of this start: 75 of 268
- Called 88.8% of time when present
- Phage (with cluster) where this start called: Amgine_57 (K6), Amohnition_58 (K6), Applecrisp_55 (K6), AuntGwenStacy_57 (Y), BAKA_160 (J), Bagrid_163 (J), Beem_160 (J), Bipper_54 (Y), BoostSeason_60 (K2), BronnyJames_152 (J), Constella_151 (J), Courthouse_154 (J), Cracklewink_54 (Y), Dallas_159 (J), DaniellEgnace_58 (AT), DarthP_58 (K6), DismalFunk_60 (K2), DismalStressor_60 (K2), DmpstrDiver_159 (J), Doughnut_60 (K2), Duke13_157 (J), Ejimix_151 (J), Ekdilam_56 (K6), Ellie_54 (K6), EricMillard_153 (J), Faiyaz_57 (Y), Faust_81 (BK1), Fefferhead_56 (K6), Findley_60 (K2), Gaia_119 (X), Gonephishing_152 (J), Halley_160 (J), Hammy_58 (K6), Hannaconda_152 (J), Hilltopfarm_56 (Y), Hughesyang_159 (J), Hurricane_57 (K3), Kalah2_151 (J), KashFlow_157 (J), Keshu_59 (K3), Klein_158 (J), Krueger_63 (K6), Lavahound_58 (K6), Lea83_57 (K3), Lucky2013_150 (J), MacnCheese_59 (K3), Marcoliusprime_60 (K2), MiaZeal_157 (J), Milly_60 (K2), Minerva_158 (J), Mufasa_60 (K2), Nebkiss_120 (X), Nekros_156 (J), Nibley_151 (J), NihilNomen_161 (J), November_56 (K6), Omega_164 (J), Optimus_151 (J), Pharb_56 (K3), Pixie_56 (K3), Porcelain_154 (J), Pound_151 (J), Rearden_152 (J), Schatzie_155 (J), SeresaTree_81 (BK1), Shaboozey_155 (J), ShedlockHolmes_58 (K3), Squint_151 (J), Stellammi_167 (UNK), Strobilo_61 (K2), Superphikiman_155 (J), Syra333_62 (K6), TBond007_55 (K3), TClif_59 (K6), TM4_57 (K2), Thibault_141 (J), ThreeRngTarjay_155 (J), TribbleTrouble_56 (K3), TunaTartare_80 (BK1), Typha_56 (Y), Wanda_158 (J), Xiaokay_153 (J), Yeet_152 (J), YoureAdopted_56 (K1), Yuna_62 (K6), Zelink_153 (J), ZoeJ_59 (K2),

Start 33:

- Found in 11 of 303 (3.6%) of genes in pham
- Manual Annotations of this start: 6 of 268
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Amelie_49 (K1), Binglebops_49 (K1), Enkosi_51 (K1), LilPharaoh_49 (K1), Nutello_49 (K1), Teejan_51 (K1), Torres_52 (K1), Trice_49 (K1),

Start 34:

- Found in 3 of 303 (1.0%) of genes in pham
- Manual Annotations of this start: 2 of 268
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BillNye_72 (BK2), Chaewon_76 (BK2), Circinus_73 (BK2),

Start 36:

- Found in 30 of 303 (9.9%) of genes in pham
- Manual Annotations of this start: 28 of 268
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belfort_83 (BK1), Boilgate_54 (K8), Chancellor_62 (K4), Cheetobro_62 (K4), Comrade_81 (BK1), DanSyl44_65 (K4), Eponine_64 (K4), Fionnbharth_62 (K4), JF1_62 (K4), Juliette_64 (K4), Karp_79 (BK1), Kraw_62 (K4), Lebo14_61 (K4), Malthus_63 (K4), Mitti_62 (K4), Muntaha_74

(BK2), OmniCritical_61 (K4), Qhanda_64 (K4), Ruthiejr_63 (K4), SamScheppers_60 (K4), Slarp_62 (K4), SparkleGoddess_81 (BK1), Stigma_80 (BK1), Taquito_61 (K4), Wakanda_73 (BK2), Westy_82 (BK1), Wintermute_62 (K4), Y10_60 (K4), Y2_60 (K4), YasnayaPolyana_61 (K4),

Start 37:

- Found in 22 of 303 (7.3%) of genes in pham
- Manual Annotations of this start: 20 of 268
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Annadreamy_79 (BK1), Azrael100_129 (V), Beuffert_78 (BK1), Blueeyedbeauty_80 (BK1), Cosmo_137 (V), DeluluLabubu_80 (BK1), Emma1919_83 (BK1), EniyanLRS_131 (V), Forrest_84 (BK1), Francob_80 (BK1), Gilson_82 (BK1), Jada_82 (BK1), Kenrey_83 (BK1), Limpid_78 (BK1), MaryV_122 (V), Maupel_81 (BK1), MeganTheeKilla_80 (BK1), Moab_81 (BK1), Patelgo_81 (BK1), Phredrick_81 (BK1), Sham_75 (BK1), Wildcat_136 (V),

Start 38:

- Found in 1 of 303 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ThursdayNight_28 (AZ),

Start 39:

- Found in 150 of 303 (49.5%) of genes in pham
- Manual Annotations of this start: 4 of 268
- Called 3.3% of time when present
- Phage (with cluster) where this start called: LindNT_56 (K1), Marleymoo_144 (J), OkiRoe_52 (K5), Prithvi_58 (K1), TreyKay_58 (K1),

Start 41:

- Found in 166 of 303 (54.8%) of genes in pham
- Manual Annotations of this start: 3 of 268
- Called 2.4% of time when present
- Phage (with cluster) where this start called: Mdavu_50 (K1), Nikao_52 (K1), SgtBeansprout_49 (K1), TingHuaYa_58 (K1),

Start 48:

- Found in 33 of 303 (10.9%) of genes in pham
- Manual Annotations of this start: 1 of 268
- Called 3.0% of time when present
- Phage (with cluster) where this start called: Bobby_149 (J),

Summary by clusters:

There are 19 clusters represented in this pham: V, UNK, BK2, AG, CW1, J, CW2, AZ, K3, K2, K1, BK1, K5, K4, Y, X, AT, K8, K6,

Info for manual annotations of cluster AG:

- Start number 28 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster AT:

- Start number 32 was manually annotated 1 time for cluster AT.

Info for manual annotations of cluster BK1:

- Start number 32 was manually annotated 2 times for cluster BK1.
- Start number 36 was manually annotated 6 times for cluster BK1.
- Start number 37 was manually annotated 15 times for cluster BK1.

Info for manual annotations of cluster BK2:

- Start number 34 was manually annotated 2 times for cluster BK2.
- Start number 36 was manually annotated 2 times for cluster BK2.

Info for manual annotations of cluster CW1:

- Start number 30 was manually annotated 2 times for cluster CW1.

Info for manual annotations of cluster J:

- Start number 14 was manually annotated 4 times for cluster J.
- Start number 19 was manually annotated 4 times for cluster J.
- Start number 32 was manually annotated 31 times for cluster J.
- Start number 48 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster K1:

- Start number 31 was manually annotated 95 times for cluster K1.
- Start number 32 was manually annotated 1 time for cluster K1.
- Start number 33 was manually annotated 6 times for cluster K1.
- Start number 39 was manually annotated 3 times for cluster K1.
- Start number 41 was manually annotated 3 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 32 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 32 was manually annotated 9 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 36 was manually annotated 19 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 7 was manually annotated 12 times for cluster K5.
- Start number 39 was manually annotated 1 time for cluster K5.

Info for manual annotations of cluster K6:

- Start number 31 was manually annotated 11 times for cluster K6.
- Start number 32 was manually annotated 13 times for cluster K6.

Info for manual annotations of cluster K8:

- Start number 36 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster V:

- Start number 37 was manually annotated 5 times for cluster V.

Info for manual annotations of cluster X:

- Start number 32 was manually annotated 2 times for cluster X.

Info for manual annotations of cluster Y:

•Start number 32 was manually annotated 5 times for cluster Y.

Gene Information:

Gene: ActinUp_57 Start: 39985, Stop: 40539, Start Num: 31

Candidate Starts for ActinUp_57:

(Start: 31 @39985 has 106 MA's), (Start: 39 @39997 has 4 MA's), (Start: 41 @40003 has 3 MA's), (49, 40051), (59, 40099), (60, 40108), (69, 40147), (72, 40177), (75, 40192), (83, 40228), (112, 40315), (123, 40339), (126, 40363), (137, 40411), (140, 40426), (146, 40444),

Gene: Adephagia_57 Start: 39986, Stop: 40540, Start Num: 31

Candidate Starts for Adephagia_57:

(6, 39839), (Start: 31 @39986 has 106 MA's), (Start: 39 @39998 has 4 MA's), (Start: 41 @40004 has 3 MA's), (49, 40052), (59, 40100), (60, 40109), (69, 40148), (72, 40178), (83, 40229), (112, 40316), (123, 40340), (140, 40427), (146, 40445), (148, 40451),

Gene: Adonis_57 Start: 40233, Stop: 40787, Start Num: 31

Candidate Starts for Adonis_57:

(6, 40083), (Start: 31 @40233 has 106 MA's), (Start: 39 @40245 has 4 MA's), (Start: 41 @40251 has 3 MA's), (49, 40299), (59, 40347), (60, 40356), (69, 40395), (72, 40425), (83, 40476), (112, 40563), (123, 40587), (140, 40674), (148, 40698),

Gene: Ageofdapage_60 Start: 40974, Stop: 41528, Start Num: 31

Candidate Starts for Ageofdapage_60:

(Start: 31 @40974 has 106 MA's), (Start: 39 @40986 has 4 MA's), (Start: 41 @40992 has 3 MA's), (49, 41040), (59, 41088), (60, 41097), (69, 41136), (72, 41166), (75, 41181), (83, 41217), (112, 41304), (123, 41328), (137, 41400), (140, 41415), (146, 41433),

Gene: AlishaPH_57 Start: 40247, Stop: 40801, Start Num: 31

Candidate Starts for AlishaPH_57:

(6, 40100), (Start: 31 @40247 has 106 MA's), (Start: 39 @40259 has 4 MA's), (Start: 41 @40265 has 3 MA's), (49, 40313), (59, 40361), (60, 40370), (69, 40409), (72, 40439), (83, 40490), (112, 40577), (123, 40601), (140, 40688), (146, 40706), (148, 40712),

Gene: Amelie_49 Start: 38047, Stop: 38598, Start Num: 33

Candidate Starts for Amelie_49:

(3, 37813), (Start: 33 @38047 has 6 MA's), (Start: 41 @38068 has 3 MA's), (47, 38110), (50, 38122), (60, 38173), (69, 38212), (72, 38242), (83, 38293), (123, 38398), (140, 38485), (146, 38503), (148, 38509), (166, 38578),

Gene: Amgine_57 Start: 41112, Stop: 41666, Start Num: 32

Candidate Starts for Amgine_57:

(Start: 32 @41112 has 75 MA's), (Start: 39 @41124 has 4 MA's), (58, 41220), (59, 41226), (60, 41235), (65, 41250), (69, 41274), (83, 41355), (112, 41442), (123, 41466), (140, 41553), (153, 41583), (154, 41598),

Gene: Amohnition_58 Start: 40704, Stop: 41258, Start Num: 32

Candidate Starts for Amohnition_58:

(Start: 32 @40704 has 75 MA's), (49, 40767), (59, 40815), (60, 40824), (62, 40830), (65, 40839), (74, 40905), (86, 40953), (115, 41040), (123, 41058), (140, 41145), (146, 41163), (154, 41190), (163, 41226),

Gene: Anaya_59 Start: 40502, Stop: 41056, Start Num: 31

Candidate Starts for Anaya_59:

(Start: 31 @40502 has 106 MA's), (Start: 39 @40514 has 4 MA's), (49, 40568), (59, 40616), (60, 40625), (69, 40664), (72, 40694), (83, 40745), (112, 40832), (123, 40856), (140, 40943), (146, 40961),

Gene: Angelica_57 Start: 40141, Stop: 40695, Start Num: 31

Candidate Starts for Angelica_57:

(Start: 31 @40141 has 106 MA's), (Start: 39 @40153 has 4 MA's), (Start: 41 @40159 has 3 MA's), (49, 40207), (59, 40255), (60, 40264), (69, 40303), (72, 40333), (83, 40384), (112, 40471), (123, 40495), (137, 40567), (140, 40582), (146, 40600),

Gene: Anma_59 Start: 40885, Stop: 41439, Start Num: 31

Candidate Starts for Anma_59:

(Start: 31 @40885 has 106 MA's), (Start: 39 @40897 has 4 MA's), (Start: 41 @40903 has 3 MA's), (49, 40951), (59, 40999), (60, 41008), (69, 41047), (83, 41128), (112, 41215), (123, 41239), (140, 41326), (146, 41344), (148, 41350),

Gene: Annadreamy_79 Start: 59408, Stop: 59899, Start Num: 37

Candidate Starts for Annadreamy_79:

(26, 59384), (Start: 37 @59408 has 20 MA's), (Start: 48 @59468 has 1 MA's), (89, 59648), (92, 59675), (128, 59744), (138, 59777), (158, 59861), (164, 59882),

Gene: Apocalypse_60 Start: 40910, Stop: 41464, Start Num: 31

Candidate Starts for Apocalypse_60:

(Start: 31 @40910 has 106 MA's), (Start: 39 @40922 has 4 MA's), (49, 40976), (59, 41024), (60, 41033), (69, 41072), (72, 41102), (83, 41153), (98, 41210), (112, 41240), (123, 41264), (140, 41351), (146, 41369), (148, 41375),

Gene: Applecrisp_55 Start: 40249, Stop: 40803, Start Num: 32

Candidate Starts for Applecrisp_55:

(Start: 32 @40249 has 75 MA's), (Start: 39 @40261 has 4 MA's), (58, 40357), (59, 40363), (60, 40372), (65, 40387), (69, 40411), (83, 40492), (112, 40579), (123, 40603), (140, 40690), (153, 40720), (154, 40735), (163, 40771),

Gene: Ariel_157 Start: 81050, Stop: 81694, Start Num: 19

Candidate Starts for Ariel_157:

(Start: 19 @81050 has 4 MA's), (Start: 32 @81107 has 75 MA's), (Start: 41 @81125 has 3 MA's), (42, 81128), (50, 81176), (55, 81203), (59, 81218), (62, 81233), (74, 81308), (82, 81344), (88, 81371), (140, 81575), (147, 81596),

Gene: Asayake_57 Start: 40301, Stop: 40855, Start Num: 31

Candidate Starts for Asayake_57:

(6, 40154), (Start: 31 @40301 has 106 MA's), (Start: 39 @40313 has 4 MA's), (Start: 41 @40319 has 3 MA's), (49, 40367), (59, 40415), (60, 40424), (69, 40463), (72, 40493), (83, 40544), (112, 40631), (123, 40655), (140, 40742), (146, 40760), (148, 40766),

Gene: Atiba_58 Start: 39949, Stop: 40503, Start Num: 31

Candidate Starts for Atiba_58:

(6, 39802), (Start: 31 @39949 has 106 MA's), (Start: 39 @39961 has 4 MA's), (Start: 41 @39967 has 3 MA's), (49, 40015), (59, 40063), (60, 40072), (69, 40111), (72, 40141), (83, 40192), (112, 40279), (123, 40303), (140, 40390), (146, 40408), (148, 40414),

Gene: AuntGwenStacy_57 Start: 42274, Stop: 42870, Start Num: 32

Candidate Starts for AuntGwenStacy_57:

(1, 41821), (4, 42085), (Start: 32 @42274 has 75 MA's), (Start: 41 @42292 has 3 MA's), (42, 42295), (43, 42301), (65, 42412), (72, 42466), (75, 42481), (83, 42517), (86, 42526), (87, 42529), (93, 42577), (98, 42580), (107, 42610), (126, 42676), (130, 42697), (170, 42844), (177, 42859),

Gene: Azrael100_129 Start: 64551, Stop: 65066, Start Num: 37

Candidate Starts for Azrael100_129:

(Start: 37 @64551 has 20 MA's), (Start: 41 @64566 has 3 MA's), (44, 64590), (45, 64596), (50, 64617), (53, 64635), (56, 64647), (57, 64650), (69, 64707), (74, 64749), (86, 64797), (87, 64800), (93, 64848), (98, 64851), (122, 64869), (131, 64920), (140, 64959), (142, 64971), (155, 65016),

Gene: BAKA_160 Start: 84987, Stop: 85523, Start Num: 32

Candidate Starts for BAKA_160:

(Start: 32 @84987 has 75 MA's), (Start: 41 @85005 has 3 MA's), (42, 85008), (Start: 48 @85047 has 1 MA's), (49, 85050), (72, 85176), (74, 85188), (86, 85239), (88, 85254), (117, 85305), (130, 85362), (164, 85488), (166, 85497),

Gene: BEEST_57 Start: 40301, Stop: 40855, Start Num: 31

Candidate Starts for BEEST_57:

(6, 40154), (Start: 31 @40301 has 106 MA's), (Start: 39 @40313 has 4 MA's), (Start: 41 @40319 has 3 MA's), (49, 40367), (59, 40415), (60, 40424), (69, 40463), (72, 40493), (83, 40544), (112, 40631), (123, 40655), (140, 40742), (146, 40760), (148, 40766),

Gene: BGlluviae_57 Start: 40104, Stop: 40658, Start Num: 31

Candidate Starts for BGlluviae_57:

(6, 39957), (Start: 31 @40104 has 106 MA's), (Start: 39 @40116 has 4 MA's), (Start: 41 @40122 has 3 MA's), (49, 40170), (59, 40218), (60, 40227), (69, 40266), (72, 40296), (83, 40347), (112, 40434), (123, 40458), (140, 40545), (146, 40563), (148, 40569),

Gene: BaghaKamala_56 Start: 39342, Stop: 39896, Start Num: 31

Candidate Starts for BaghaKamala_56:

(Start: 31 @39342 has 106 MA's), (Start: 39 @39354 has 4 MA's), (49, 39408), (59, 39456), (60, 39465), (69, 39504), (72, 39534), (83, 39585), (112, 39672), (123, 39696), (140, 39783), (146, 39801), (148, 39807),

Gene: Bagrid_163 Start: 86216, Stop: 86752, Start Num: 32

Candidate Starts for Bagrid_163:

(Start: 32 @86216 has 75 MA's), (Start: 41 @86234 has 3 MA's), (42, 86237), (Start: 48 @86276 has 1 MA's), (49, 86279), (72, 86405), (74, 86417), (86, 86468), (88, 86483), (117, 86534), (130, 86591), (164, 86717), (166, 86726),

Gene: BarrelRoll_57 Start: 39965, Stop: 40519, Start Num: 31

Candidate Starts for BarrelRoll_57:

(Start: 31 @39965 has 106 MA's), (Start: 39 @39977 has 4 MA's), (Start: 41 @39983 has 3 MA's), (49, 40031), (59, 40079), (60, 40088), (69, 40127), (72, 40157), (83, 40208), (112, 40295), (123, 40319), (140, 40406), (146, 40424), (148, 40430),

Gene: Beem_160 Start: 86179, Stop: 86715, Start Num: 32

Candidate Starts for Beem_160:

(Start: 32 @86179 has 75 MA's), (Start: 41 @86197 has 3 MA's), (42, 86200), (72, 86368), (74, 86380), (86, 86431), (88, 86446), (140, 86596), (166, 86689),

Gene: Beezoo_59 Start: 40949, Stop: 41503, Start Num: 31

Candidate Starts for Beezoo_59:

(Start: 31 @40949 has 106 MA's), (Start: 39 @40961 has 4 MA's), (Start: 41 @40967 has 3 MA's), (49, 41015), (59, 41063), (60, 41072), (69, 41111), (72, 41141), (83, 41192), (112, 41279), (123, 41303), (140, 41390), (146, 41408), (148, 41414),

Gene: Belfort_83 Start: 61237, Stop: 61725, Start Num: 36

Candidate Starts for Belfort_83:

(Start: 36 @61237 has 28 MA's), (Start: 48 @61297 has 1 MA's), (74, 61417), (81, 61441), (85, 61456), (87, 61462), (89, 61477), (124, 61549), (128, 61573), (131, 61582), (138, 61606), (151, 61648), (164, 61711), (168, 61720),

Gene: Bella96_58 Start: 40730, Stop: 41284, Start Num: 31

Candidate Starts for Bella96_58:

(Start: 31 @40730 has 106 MA's), (Start: 39 @40742 has 4 MA's), (Start: 41 @40748 has 3 MA's), (49, 40796), (60, 40853), (69, 40892), (83, 40973), (112, 41060), (123, 41084), (140, 41171), (146, 41189), (148, 41195),

Gene: Belladonna_57 Start: 40104, Stop: 40658, Start Num: 31

Candidate Starts for Belladonna_57:

(6, 39957), (Start: 31 @40104 has 106 MA's), (Start: 39 @40116 has 4 MA's), (Start: 41 @40122 has 3 MA's), (49, 40170), (59, 40218), (60, 40227), (69, 40266), (72, 40296), (83, 40347), (112, 40434), (123, 40458), (140, 40545), (146, 40563), (148, 40569),

Gene: Bern_58 Start: 38932, Stop: 39486, Start Num: 31

Candidate Starts for Bern_58:

(Start: 31 @38932 has 106 MA's), (Start: 39 @38944 has 4 MA's), (49, 38998), (59, 39046), (60, 39055), (69, 39094), (72, 39124), (83, 39175), (112, 39262), (123, 39286), (140, 39373), (146, 39391), (148, 39397),

Gene: Beuffert_78 Start: 59970, Stop: 60461, Start Num: 37

Candidate Starts for Beuffert_78:

(26, 59946), (Start: 37 @59970 has 20 MA's), (Start: 48 @60030 has 1 MA's), (89, 60210), (128, 60306), (131, 60315), (135, 60330), (138, 60339), (139, 60342), (141, 60357), (158, 60423),

Gene: Biglebops_49 Start: 38047, Stop: 38598, Start Num: 33

Candidate Starts for Biglebops_49:

(3, 37813), (Start: 33 @38047 has 6 MA's), (Start: 41 @38068 has 3 MA's), (47, 38110), (50, 38122), (60, 38173), (69, 38212), (72, 38242), (83, 38293), (123, 38398), (140, 38485), (146, 38503), (148, 38509), (166, 38578),

Gene: BillNye_72 Start: 61063, Stop: 61557, Start Num: 34

Candidate Starts for BillNye_72:

(Start: 34 @61063 has 2 MA's), (Start: 48 @61129 has 1 MA's), (89, 61309), (124, 61381), (128, 61405), (131, 61414), (138, 61438), (141, 61456), (168, 61552),

Gene: Bipper_54 Start: 40859, Stop: 41473, Start Num: 32

Candidate Starts for Bipper_54:

(10, 40778), (11, 40781), (Start: 32 @40859 has 75 MA's), (Start: 41 @40877 has 3 MA's), (42, 40880), (47, 40919), (52, 40946), (57, 40964), (69, 41021), (72, 41051), (86, 41111), (87, 41114), (93, 41162), (108, 41198), (116, 41216), (119, 41228), (120, 41231), (131, 41291), (145, 41351), (164, 41420),

Gene: Blizzard_57 Start: 40301, Stop: 40855, Start Num: 31

Candidate Starts for Blizzard_57:

(6, 40154), (Start: 31 @40301 has 106 MA's), (Start: 39 @40313 has 4 MA's), (Start: 41 @40319 has 3 MA's), (49, 40367), (59, 40415), (60, 40424), (69, 40463), (72, 40493), (83, 40544), (112, 40631), (123, 40655), (140, 40742), (146, 40760), (148, 40766),

Gene: Blueeyedbeauty_80 Start: 59360, Stop: 59851, Start Num: 37

Candidate Starts for Blueeyedbeauty_80:

(26, 59336), (Start: 37 @59360 has 20 MA's), (Start: 48 @59420 has 1 MA's), (54, 59447), (89, 59600), (106, 59651), (126, 59681), (128, 59696), (135, 59720), (138, 59729), (158, 59813), (164, 59834),

Gene: Bobby_149 Start: 86590, Stop: 87060, Start Num: 48

Candidate Starts for Bobby_149:

(Start: 48 @86590 has 1 MA's), (49, 86593), (72, 86719), (74, 86731), (86, 86782), (88, 86797), (117, 86848), (130, 86905), (164, 87031), (172, 87052),

Gene: Boiiii_57 Start: 40303, Stop: 40857, Start Num: 31

Candidate Starts for Boiiii_57:

(6, 40156), (Start: 31 @40303 has 106 MA's), (Start: 39 @40315 has 4 MA's), (Start: 41 @40321 has 3 MA's), (49, 40369), (59, 40417), (60, 40426), (69, 40465), (72, 40495), (83, 40546), (112, 40633), (123, 40657), (140, 40744), (146, 40762), (148, 40768),

Gene: Boilgate_54 Start: 39890, Stop: 40492, Start Num: 36

Candidate Starts for Boilgate_54:

(20, 39833), (Start: 36 @39890 has 28 MA's), (65, 40025), (69, 40049), (86, 40139), (93, 40190), (123, 40277), (130, 40322), (140, 40364), (146, 40382), (163, 40451),

Gene: Bombitas_146 Start: 82178, Stop: 82789, Start Num: 14

Candidate Starts for Bombitas_146:

(Start: 14 @82178 has 4 MA's), (Start: 19 @82196 has 4 MA's), (Start: 32 @82253 has 75 MA's), (Start: 41 @82271 has 3 MA's), (72, 82442), (74, 82454), (86, 82505), (88, 82520), (140, 82670), (147, 82691),

Gene: BoostSeason_60 Start: 41609, Stop: 42142, Start Num: 32

Candidate Starts for BoostSeason_60:

(Start: 32 @41609 has 75 MA's), (40, 41624), (49, 41672), (59, 41720), (60, 41729), (68, 41762), (69, 41768), (70, 41774), (86, 41858), (105, 41924),

Gene: BronnyJames_152 Start: 81368, Stop: 81955, Start Num: 32

Candidate Starts for BronnyJames_152:

(Start: 14 @81293 has 4 MA's), (Start: 19 @81311 has 4 MA's), (Start: 32 @81368 has 75 MA's), (43, 81395), (50, 81437), (61, 81491), (72, 81557), (87, 81620), (89, 81635), (114, 81719), (138, 81827), (140, 81836), (146, 81854), (147, 81857),

Gene: Bryler_60 Start: 39479, Stop: 40042, Start Num: 31

Candidate Starts for Bryler_60:

(Start: 31 @39479 has 106 MA's), (Start: 39 @39491 has 4 MA's), (Start: 41 @39497 has 3 MA's), (59, 39593), (69, 39641), (83, 39722), (113, 39812), (123, 39842), (140, 39929), (146, 39947), (163, 40010),

Gene: CREW_57 Start: 40104, Stop: 40658, Start Num: 31

Candidate Starts for CREW_57:

(6, 39957), (Start: 31 @40104 has 106 MA's), (Start: 39 @40116 has 4 MA's), (Start: 41 @40122 has 3 MA's), (49, 40170), (59, 40218), (60, 40227), (69, 40266), (72, 40296), (83, 40347), (112, 40434), (123, 40458), (140, 40545), (146, 40563), (148, 40569),

Gene: Cain_60 Start: 39467, Stop: 40030, Start Num: 31

Candidate Starts for Cain_60:

(Start: 31 @39467 has 106 MA's), (Start: 39 @39479 has 4 MA's), (Start: 41 @39485 has 3 MA's), (57, 39572), (59, 39581), (69, 39629), (83, 39710), (113, 39800), (123, 39830), (140, 39917), (146, 39935), (163, 39998),

Gene: CallaLilly_57 Start: 40027, Stop: 40581, Start Num: 31

Candidate Starts for CallaLilly_57:

(6, 39880), (Start: 31 @40027 has 106 MA's), (Start: 39 @40039 has 4 MA's), (Start: 41 @40045 has 3 MA's), (49, 40093), (59, 40141), (60, 40150), (69, 40189), (72, 40219), (83, 40270), (112, 40357), (123, 40381), (140, 40468), (146, 40486), (148, 40492),

Gene: Capricorn_57 Start: 40104, Stop: 40658, Start Num: 31

Candidate Starts for Capricorn_57:

(6, 39957), (Start: 31 @40104 has 106 MA's), (Start: 39 @40116 has 4 MA's), (Start: 41 @40122 has 3 MA's), (49, 40170), (59, 40218), (60, 40227), (69, 40266), (72, 40296), (83, 40347), (112, 40434), (123, 40458), (140, 40545), (146, 40563), (148, 40569),

Gene: CaseJules_59 Start: 40301, Stop: 40855, Start Num: 31

Candidate Starts for CaseJules_59:

(6, 40154), (Start: 31 @40301 has 106 MA's), (Start: 39 @40313 has 4 MA's), (Start: 41 @40319 has 3 MA's), (49, 40367), (59, 40415), (60, 40424), (69, 40463), (72, 40493), (83, 40544), (112, 40631), (123, 40655), (140, 40742), (146, 40760), (148, 40766),

Gene: Chaewon_76 Start: 61004, Stop: 61498, Start Num: 34

Candidate Starts for Chaewon_76:

(Start: 34 @61004 has 2 MA's), (Start: 48 @61070 has 1 MA's), (89, 61250), (124, 61322), (128, 61346), (131, 61355), (138, 61379), (141, 61397), (168, 61493),

Gene: Chancellor_62 Start: 40161, Stop: 40757, Start Num: 36

Candidate Starts for Chancellor_62:

(Start: 36 @40161 has 28 MA's), (44, 40203), (60, 40281), (72, 40350), (74, 40362), (86, 40410), (123, 40530), (130, 40575), (140, 40617), (145, 40638), (146, 40641), (164, 40722),

Gene: Chavito_60 Start: 41135, Stop: 41692, Start Num: 31

Candidate Starts for Chavito_60:

(Start: 31 @41135 has 106 MA's), (50, 41210), (59, 41252), (60, 41261), (68, 41294), (69, 41300), (83, 41381), (123, 41492), (140, 41579), (146, 41597), (155, 41633), (166, 41672),

Gene: CheetoDust_56 Start: 39386, Stop: 39940, Start Num: 31

Candidate Starts for CheetoDust_56:

(Start: 31 @39386 has 106 MA's), (Start: 39 @39398 has 4 MA's), (49, 39452), (59, 39500), (60, 39509), (69, 39548), (72, 39578), (83, 39629), (112, 39716), (123, 39740), (140, 39827), (146, 39845), (148, 39851),

Gene: Cheetobro_62 Start: 40158, Stop: 40754, Start Num: 36

Candidate Starts for Cheetobro_62:

(Start: 36 @40158 has 28 MA's), (44, 40200), (60, 40278), (72, 40347), (74, 40359), (86, 40407), (123, 40527), (130, 40572), (140, 40614), (145, 40635), (146, 40638), (164, 40719),

Gene: Chris_59 Start: 40680, Stop: 41237, Start Num: 31

Candidate Starts for Chris_59:

(Start: 31 @40680 has 106 MA's), (Start: 39 @40692 has 4 MA's), (57, 40782), (65, 40815), (74, 40881), (123, 41037), (132, 41091), (140, 41124), (146, 41142),

Gene: Circinus_73 Start: 61050, Stop: 61544, Start Num: 34

Candidate Starts for Circinus_73:

(Start: 34 @61050 has 2 MA's), (Start: 48 @61116 has 1 MA's), (89, 61296), (124, 61368), (128, 61392), (131, 61401), (138, 61425), (141, 61443), (168, 61539),

Gene: Clipper_60 Start: 40564, Stop: 41118, Start Num: 31

Candidate Starts for Clipper_60:

(Start: 31 @40564 has 106 MA's), (Start: 39 @40576 has 4 MA's), (Start: 41 @40582 has 3 MA's), (49, 40630), (59, 40678), (60, 40687), (69, 40726), (72, 40756), (75, 40771), (83, 40807), (112, 40894), (123, 40918), (126, 40942), (137, 40990), (140, 41005), (146, 41023), (163, 41086),

Gene: Comrade_81 Start: 60853, Stop: 61341, Start Num: 36

Candidate Starts for Comrade_81:

(Start: 36 @60853 has 28 MA's), (Start: 48 @60913 has 1 MA's), (74, 61033), (81, 61057), (85, 61072), (87, 61078), (89, 61093), (101, 61129), (124, 61165), (128, 61189), (131, 61198), (138, 61222), (151, 61264), (164, 61327), (168, 61336),

Gene: Constella_151 Start: 83218, Stop: 83754, Start Num: 32

Candidate Starts for Constella_151:

(Start: 32 @83218 has 75 MA's), (Start: 41 @83236 has 3 MA's), (42, 83239), (Start: 48 @83278 has 1 MA's), (49, 83281), (72, 83407), (74, 83419), (86, 83470), (88, 83485), (117, 83536), (130, 83593), (166, 83728),

Gene: Cosmo_137 Start: 64981, Stop: 65496, Start Num: 37

Candidate Starts for Cosmo_137:

(Start: 37 @64981 has 20 MA's), (Start: 41 @64996 has 3 MA's), (44, 65020), (45, 65026), (50, 65047), (53, 65065), (56, 65077), (57, 65080), (69, 65137), (74, 65179), (86, 65227), (87, 65230), (93, 65278), (98, 65281), (122, 65299), (131, 65350), (140, 65389), (142, 65401), (155, 65446),

Gene: Courthouse_154 Start: 81602, Stop: 82138, Start Num: 32

Candidate Starts for Courthouse_154:

(27, 81590), (29, 81596), (Start: 32 @81602 has 75 MA's), (Start: 39 @81614 has 4 MA's), (40, 81617), (42, 81623), (49, 81665), (65, 81737), (83, 81845), (86, 81854), (88, 81869), (117, 81920), (130, 81977), (140, 82019), (147, 82040),

Gene: Cracklewink_54 Start: 40852, Stop: 41466, Start Num: 32

Candidate Starts for Cracklewink_54:

(10, 40771), (11, 40774), (Start: 32 @40852 has 75 MA's), (Start: 41 @40870 has 3 MA's), (42, 40873), (47, 40912), (52, 40939), (57, 40957), (69, 41014), (72, 41044), (86, 41104), (87, 41107), (93, 41155), (108, 41191), (116, 41209), (119, 41221), (120, 41224), (131, 41284), (145, 41344), (164, 41413),

Gene: CrimD_57 Start: 40220, Stop: 40774, Start Num: 31

Candidate Starts for CrimD_57:

(Start: 31 @40220 has 106 MA's), (Start: 39 @40232 has 4 MA's), (Start: 41 @40238 has 3 MA's), (49, 40286), (59, 40334), (60, 40343), (69, 40382), (72, 40412), (75, 40427), (83, 40463), (112, 40550), (123, 40574), (137, 40646), (140, 40661), (146, 40679), (163, 40742),

Gene: Curiosium_59 Start: 38846, Stop: 39418, Start Num: 31

Candidate Starts for Curiosium_59:

(Start: 31 @38846 has 106 MA's), (Start: 39 @38858 has 4 MA's), (Start: 41 @38864 has 3 MA's), (47, 38906), (59, 38960), (60, 38969), (66, 38990), (68, 39002), (69, 39008), (83, 39089), (123, 39212), (140, 39299), (146, 39317), (171, 39407),

Gene: Dallas_159 Start: 85402, Stop: 85938, Start Num: 32

Candidate Starts for Dallas_159:

(Start: 32 @85402 has 75 MA's), (Start: 41 @85420 has 3 MA's), (42, 85423), (72, 85591), (74, 85603), (86, 85654), (88, 85669), (140, 85819), (166, 85912),

Gene: Dalmuri_57 Start: 40104, Stop: 40658, Start Num: 31

Candidate Starts for Dalmuri_57:

(6, 39957), (Start: 31 @40104 has 106 MA's), (Start: 39 @40116 has 4 MA's), (Start: 41 @40122 has 3 MA's), (49, 40170), (59, 40218), (60, 40227), (69, 40266), (72, 40296), (83, 40347), (112, 40434), (123, 40458), (140, 40545), (146, 40563), (148, 40569),

Gene: DanSyl44_65 Start: 41286, Stop: 41948, Start Num: 36

Candidate Starts for DanSyl44_65:

(Start: 36 @41286 has 28 MA's), (44, 41328), (60, 41406), (72, 41475), (74, 41487), (86, 41535), (91, 41571), (100, 41661), (103, 41670), (123, 41721), (130, 41766), (140, 41808), (145, 41829), (146, 41832), (164, 41913),

Gene: DanielleIgnace_58 Start: 38690, Stop: 39253, Start Num: 32

Candidate Starts for DanielleIgnace_58:

(Start: 32 @38690 has 75 MA's), (60, 38831), (66, 38852), (74, 38915), (128, 39083), (136, 39110), (156, 39188), (159, 39197), (165, 39218),

Gene: DartGoblin_60 Start: 40702, Stop: 41256, Start Num: 31

Candidate Starts for DartGoblin_60:

(Start: 31 @40702 has 106 MA's), (Start: 39 @40714 has 4 MA's), (Start: 41 @40720 has 3 MA's), (49, 40768), (60, 40825), (69, 40864), (83, 40945), (112, 41032), (123, 41056), (140, 41143), (146, 41161), (148, 41167),

Gene: DarthP_58 Start: 40588, Stop: 41142, Start Num: 32

Candidate Starts for DarthP_58:

(Start: 32 @40588 has 75 MA's), (49, 40651), (59, 40699), (60, 40708), (62, 40714), (65, 40723), (74, 40789), (86, 40837), (115, 40924), (123, 40942), (140, 41029), (146, 41047), (154, 41074), (163, 41110),

Gene: Dartin_60 Start: 40625, Stop: 41188, Start Num: 31

Candidate Starts for Dartin_60:

(Start: 31 @40625 has 106 MA's), (50, 40700), (59, 40742), (60, 40751), (68, 40784), (69, 40790), (83, 40871), (123, 40988), (140, 41075), (146, 41093), (155, 41129), (166, 41168),

Gene: Deby_57 Start: 40163, Stop: 40717, Start Num: 31

Candidate Starts for Deby_57:

(6, 40013), (Start: 31 @40163 has 106 MA's), (Start: 39 @40175 has 4 MA's), (Start: 41 @40181 has 3 MA's), (49, 40229), (59, 40277), (60, 40286), (69, 40325), (72, 40355), (83, 40406), (112, 40493), (123,

40517), (140, 40604), (148, 40628),

Gene: DeluluLabubu_80 Start: 58901, Stop: 59389, Start Num: 37

Candidate Starts for DeluluLabubu_80:

(Start: 37 @58901 has 20 MA's), (59, 59006), (74, 59081), (84, 59117), (87, 59126), (89, 59141), (124, 59213), (128, 59237), (131, 59246), (138, 59270), (151, 59312), (164, 59375), (168, 59384),

Gene: Devera_62 Start: 40742, Stop: 41314, Start Num: 31

Candidate Starts for Devera_62:

(Start: 31 @40742 has 106 MA's), (Start: 39 @40754 has 4 MA's), (Start: 41 @40760 has 3 MA's), (49, 40808), (59, 40856), (60, 40865), (68, 40898), (69, 40904), (83, 40985), (123, 41108), (140, 41195), (146, 41213), (171, 41303),

Gene: DismalFunk_60 Start: 42031, Stop: 42564, Start Num: 32

Candidate Starts for DismalFunk_60:

(21, 41980), (Start: 32 @42031 has 75 MA's), (40, 42046), (49, 42094), (59, 42142), (60, 42151), (68, 42184), (69, 42190), (70, 42196), (86, 42280), (105, 42346),

Gene: DismalStressor_60 Start: 42031, Stop: 42564, Start Num: 32

Candidate Starts for DismalStressor_60:

(21, 41980), (Start: 32 @42031 has 75 MA's), (40, 42046), (49, 42094), (59, 42142), (60, 42151), (68, 42184), (69, 42190), (70, 42196), (86, 42280), (105, 42346),

Gene: DmpstrDiver_159 Start: 84129, Stop: 84665, Start Num: 32

Candidate Starts for DmpstrDiver_159:

(Start: 32 @84129 has 75 MA's), (Start: 41 @84147 has 3 MA's), (42, 84150), (72, 84318), (74, 84330), (86, 84381), (88, 84396), (140, 84546), (166, 84639),

Gene: Dole_60 Start: 40745, Stop: 41317, Start Num: 31

Candidate Starts for Dole_60:

(Start: 31 @40745 has 106 MA's), (Start: 39 @40757 has 4 MA's), (Start: 41 @40763 has 3 MA's), (49, 40811), (59, 40859), (60, 40868), (68, 40901), (69, 40907), (83, 40988), (123, 41111), (140, 41198), (146, 41216), (171, 41306),

Gene: Doughnut_60 Start: 41650, Stop: 42183, Start Num: 32

Candidate Starts for Doughnut_60:

(Start: 32 @41650 has 75 MA's), (40, 41665), (49, 41713), (59, 41761), (60, 41770), (68, 41803), (69, 41809), (70, 41815), (86, 41899), (105, 41965),

Gene: Dove_146 Start: 80534, Stop: 81145, Start Num: 14

Candidate Starts for Dove_146:

(Start: 14 @80534 has 4 MA's), (Start: 19 @80552 has 4 MA's), (Start: 32 @80609 has 75 MA's), (Start: 41 @80627 has 3 MA's), (72, 80798), (74, 80810), (86, 80861), (88, 80876), (140, 81026), (147, 81047),

Gene: DrHayes_58 Start: 40885, Stop: 41439, Start Num: 31

Candidate Starts for DrHayes_58:

(Start: 31 @40885 has 106 MA's), (Start: 39 @40897 has 4 MA's), (Start: 41 @40903 has 3 MA's), (49, 40951), (59, 40999), (60, 41008), (69, 41047), (83, 41128), (112, 41215), (123, 41239), (140, 41326), (146, 41344), (148, 41350),

Gene: Duke13_157 Start: 83483, Stop: 84019, Start Num: 32

Candidate Starts for Duke13_157:

(Start: 32 @83483 has 75 MA's), (Start: 41 @83501 has 3 MA's), (42, 83504), (Start: 48 @83543 has 1 MA's), (49, 83546), (72, 83672), (74, 83684), (86, 83735), (88, 83750), (117, 83801), (130, 83858), (164, 83984), (166, 83993),

Gene: Durfee_57 Start: 40301, Stop: 40855, Start Num: 31

Candidate Starts for Durfee_57:

(6, 40154), (Start: 31 @40301 has 106 MA's), (Start: 39 @40313 has 4 MA's), (Start: 41 @40319 has 3 MA's), (49, 40367), (59, 40415), (60, 40424), (69, 40463), (72, 40493), (83, 40544), (112, 40631), (123, 40655), (140, 40742), (146, 40760), (148, 40766),

Gene: Efra2_60 Start: 39747, Stop: 40313, Start Num: 31

Candidate Starts for Efra2_60:

(Start: 31 @39747 has 106 MA's), (Start: 39 @39759 has 4 MA's), (Start: 41 @39765 has 3 MA's), (57, 39852), (68, 39903), (69, 39909), (83, 39990), (123, 40113), (140, 40200), (146, 40218), (148, 40224), (163, 40281),

Gene: Ejimix_151 Start: 84390, Stop: 84926, Start Num: 32

Candidate Starts for Ejimix_151:

(Start: 32 @84390 has 75 MA's), (Start: 41 @84408 has 3 MA's), (42, 84411), (72, 84579), (74, 84591), (86, 84642), (88, 84657), (140, 84807), (166, 84900),

Gene: Ekdilam_56 Start: 40591, Stop: 41142, Start Num: 32

Candidate Starts for Ekdilam_56:

(Start: 32 @40591 has 75 MA's), (Start: 39 @40603 has 4 MA's), (50, 40660), (59, 40702), (60, 40711), (69, 40750), (74, 40792), (86, 40840), (123, 40942), (140, 41029), (146, 41047), (154, 41074),

Gene: Ellie_54 Start: 39941, Stop: 40495, Start Num: 32

Candidate Starts for Ellie_54:

(Start: 32 @39941 has 75 MA's), (Start: 39 @39953 has 4 MA's), (58, 40049), (59, 40055), (60, 40064), (65, 40079), (69, 40103), (83, 40184), (112, 40271), (123, 40295), (140, 40382), (153, 40412), (154, 40427),

Gene: Emerson_58 Start: 39982, Stop: 40536, Start Num: 31

Candidate Starts for Emerson_58:

(Start: 31 @39982 has 106 MA's), (Start: 39 @39994 has 4 MA's), (Start: 41 @40000 has 3 MA's), (49, 40048), (59, 40096), (60, 40105), (69, 40144), (72, 40174), (83, 40225), (112, 40312), (123, 40336), (140, 40423), (148, 40447),

Gene: Emma1919_83 Start: 59575, Stop: 60063, Start Num: 37

Candidate Starts for Emma1919_83:

(Start: 37 @59575 has 20 MA's), (67, 59701), (74, 59755), (78, 59770), (84, 59791), (87, 59800), (89, 59815), (124, 59887), (128, 59911), (131, 59920), (138, 59944), (151, 59986), (164, 60049), (168, 60058),

Gene: EniyanLRS_131 Start: 65177, Stop: 65725, Start Num: 37

Candidate Starts for EniyanLRS_131:

(Start: 37 @65177 has 20 MA's), (Start: 41 @65192 has 3 MA's), (44, 65216), (45, 65222), (50, 65243), (53, 65261), (56, 65273), (57, 65276), (69, 65333), (74, 65375), (86, 65423), (87, 65426), (93, 65474), (98, 65477), (131, 65546), (140, 65585), (142, 65597), (155, 65642), (169, 65693),

Gene: Enkosi_51 Start: 40660, Stop: 41211, Start Num: 33

Candidate Starts for Enkosi_51:

(3, 40426), (Start: 33 @40660 has 6 MA's), (Start: 41 @40681 has 3 MA's), (47, 40723), (50, 40735), (60, 40786), (69, 40825), (72, 40855), (83, 40906), (123, 41011), (140, 41098), (146, 41116), (148, 41122), (166, 41191),

Gene: Eponine_64 Start: 41004, Stop: 41600, Start Num: 36

Candidate Starts for Eponine_64:

(Start: 36 @41004 has 28 MA's), (44, 41046), (60, 41124), (72, 41193), (74, 41205), (86, 41253), (123, 41373), (130, 41418), (140, 41460), (145, 41481), (146, 41484), (164, 41565),

Gene: EricMillard_153 Start: 84826, Stop: 85362, Start Num: 32

Candidate Starts for EricMillard_153:

(Start: 32 @84826 has 75 MA's), (Start: 41 @84844 has 3 MA's), (42, 84847), (Start: 48 @84886 has 1 MA's), (49, 84889), (72, 85015), (74, 85027), (86, 85078), (88, 85093), (117, 85144), (130, 85201), (166, 85336),

Gene: Faiyaz_57 Start: 42264, Stop: 42860, Start Num: 32

Candidate Starts for Faiyaz_57:

(Start: 32 @42264 has 75 MA's), (Start: 41 @42282 has 3 MA's), (42, 42285), (43, 42291), (65, 42402), (72, 42456), (75, 42471), (83, 42507), (86, 42516), (87, 42519), (93, 42567), (98, 42570), (107, 42600), (126, 42666), (130, 42687), (170, 42834), (177, 42849),

Gene: Faust_81 Start: 60777, Stop: 61277, Start Num: 32

Candidate Starts for Faust_81:

(Start: 32 @60777 has 75 MA's), (44, 60825), (67, 60912), (85, 61005), (89, 61026), (125, 61101), (128, 61122), (131, 61131), (135, 61146), (138, 61155), (158, 61239), (164, 61260),

Gene: Fefferhead_56 Start: 39888, Stop: 40442, Start Num: 32

Candidate Starts for Fefferhead_56:

(Start: 32 @39888 has 75 MA's), (Start: 39 @39900 has 4 MA's), (58, 39996), (59, 40002), (60, 40011), (65, 40026), (69, 40050), (83, 40131), (112, 40218), (123, 40242), (140, 40329), (153, 40359), (154, 40374), (163, 40410),

Gene: Feyre_54 Start: 40604, Stop: 41392, Start Num: 7

Candidate Starts for Feyre_54:

(Start: 7 @40604 has 12 MA's), (16, 40652), (17, 40658), (Start: 39 @40727 has 4 MA's), (51, 40793), (59, 40826), (65, 40850), (70, 40880), (72, 40904), (75, 40919), (86, 40964), (88, 40979), (93, 41015), (94, 41018), (95, 41027), (97, 41033), (101, 41045), (110, 41078), (123, 41117), (127, 41147), (142, 41216), (146, 41222), (148, 41228), (152, 41234), (166, 41300), (184, 41369),

Gene: Findley_60 Start: 42024, Stop: 42557, Start Num: 32

Candidate Starts for Findley_60:

(21, 41973), (Start: 32 @42024 has 75 MA's), (40, 42039), (49, 42087), (59, 42135), (60, 42144), (68, 42177), (69, 42183), (70, 42189), (86, 42273), (105, 42339),

Gene: Fionnbharth_62 Start: 40402, Stop: 40998, Start Num: 36

Candidate Starts for Fionnbharth_62:

(Start: 36 @40402 has 28 MA's), (44, 40444), (60, 40522), (72, 40591), (74, 40603), (86, 40651), (123, 40771), (130, 40816), (140, 40858), (145, 40879), (146, 40882), (164, 40963),

Gene: Forrest_84 Start: 60868, Stop: 61356, Start Num: 37

Candidate Starts for Forrest_84:

(Start: 37 @60868 has 20 MA's), (59, 60973), (74, 61048), (78, 61063), (84, 61084), (87, 61093), (89, 61108), (124, 61180), (128, 61204), (131, 61213), (138, 61237), (151, 61279), (164, 61342), (168,

61351),

Gene: Francob_80 Start: 59594, Stop: 60082, Start Num: 37

Candidate Starts for Francob_80:

(Start: 37 @59594 has 20 MA's), (Start: 48 @59654 has 1 MA's), (74, 59774), (89, 59834), (124, 59906), (128, 59930), (131, 59939), (132, 59945), (138, 59963), (151, 60005), (158, 60047), (164, 60068), (168, 60077),

Gene: GRU3_25 Start: 16472, Stop: 17227, Start Num: 5

Candidate Starts for GRU3_25:

(5, 16472), (52, 16718), (77, 16865), (86, 16904), (98, 16955), (161, 17159), (164, 17171),

Gene: Gaia_119 Start: 67024, Stop: 67569, Start Num: 32

Candidate Starts for Gaia_119:

(Start: 32 @67024 has 75 MA's), (49, 67087), (69, 67183), (72, 67213), (74, 67225), (83, 67267), (89, 67294), (125, 67387), (128, 67408), (138, 67441), (140, 67450), (146, 67468), (154, 67495), (164, 67534), (174, 67561),

Gene: Ganymede_58 Start: 40365, Stop: 40919, Start Num: 31

Candidate Starts for Ganymede_58:

(6, 40215), (Start: 31 @40365 has 106 MA's), (Start: 39 @40377 has 4 MA's), (Start: 41 @40383 has 3 MA's), (49, 40431), (59, 40479), (60, 40488), (69, 40527), (72, 40557), (83, 40608), (112, 40695), (123, 40719), (140, 40806), (146, 40824), (148, 40830),

Gene: Gengar_52 Start: 39018, Stop: 39797, Start Num: 7

Candidate Starts for Gengar_52:

(2, 38847), (Start: 7 @39018 has 12 MA's), (16, 39066), (17, 39072), (Start: 39 @39141 has 4 MA's), (51, 39207), (59, 39240), (65, 39264), (70, 39294), (72, 39318), (75, 39333), (86, 39378), (88, 39393), (93, 39429), (94, 39432), (95, 39441), (101, 39459), (110, 39492), (123, 39531), (127, 39561), (142, 39630), (146, 39636), (148, 39642), (152, 39648), (166, 39714), (184, 39783),

Gene: Geraldini_60 Start: 41031, Stop: 41585, Start Num: 31

Candidate Starts for Geraldini_60:

(Start: 31 @41031 has 106 MA's), (Start: 39 @41043 has 4 MA's), (49, 41097), (59, 41145), (60, 41154), (69, 41193), (72, 41223), (83, 41274), (112, 41361), (123, 41385), (140, 41472), (146, 41490), (148, 41496),

Gene: Gilson_82 Start: 59537, Stop: 60025, Start Num: 37

Candidate Starts for Gilson_82:

(Start: 37 @59537 has 20 MA's), (59, 59642), (74, 59717), (78, 59732), (84, 59753), (87, 59762), (89, 59777), (124, 59849), (128, 59873), (131, 59882), (138, 59906), (151, 59948), (164, 60011), (168, 60020),

Gene: Gonephishing_152 Start: 83062, Stop: 83598, Start Num: 32

Candidate Starts for Gonephishing_152:

(Start: 19 @83005 has 4 MA's), (Start: 32 @83062 has 75 MA's), (Start: 41 @83080 has 3 MA's), (72, 83251), (74, 83263), (86, 83314), (88, 83329), (140, 83479), (147, 83500),

Gene: Guanica15_59 Start: 39488, Stop: 40054, Start Num: 31

Candidate Starts for Guanica15_59:

(Start: 31 @39488 has 106 MA's), (Start: 39 @39500 has 4 MA's), (Start: 41 @39506 has 3 MA's), (68, 39644), (69, 39650), (83, 39731), (123, 39854), (140, 39941), (146, 39959), (148, 39965), (163, 40022),

Gene: Guillsminger_53 Start: 38989, Stop: 39768, Start Num: 7

Candidate Starts for Guillsminger_53:

(Start: 7 @38989 has 12 MA's), (8, 39007), (16, 39037), (17, 39043), (Start: 39 @39112 has 4 MA's), (51, 39178), (65, 39235), (70, 39265), (72, 39289), (75, 39304), (86, 39349), (88, 39364), (94, 39403), (101, 39430), (110, 39463), (124, 39517), (142, 39601), (148, 39613), (157, 39652), (166, 39685), (183, 39739),

Gene: Halley_160 Start: 84706, Stop: 85242, Start Num: 32

Candidate Starts for Halley_160:

(Start: 32 @84706 has 75 MA's), (Start: 41 @84724 has 3 MA's), (42, 84727), (72, 84895), (74, 84907), (86, 84958), (88, 84973), (140, 85123), (166, 85216),

Gene: Hammy_58 Start: 40576, Stop: 41130, Start Num: 32

Candidate Starts for Hammy_58:

(Start: 32 @40576 has 75 MA's), (49, 40639), (59, 40687), (60, 40696), (62, 40702), (65, 40711), (74, 40777), (86, 40825), (115, 40912), (123, 40930), (140, 41017), (146, 41035), (154, 41062), (163, 41098),

Gene: Hannaconda_152 Start: 85066, Stop: 85653, Start Num: 32

Candidate Starts for Hannaconda_152:

(Start: 14 @84991 has 4 MA's), (Start: 19 @85009 has 4 MA's), (Start: 32 @85066 has 75 MA's), (43, 85093), (50, 85135), (61, 85189), (72, 85255), (87, 85318), (89, 85333), (114, 85417), (138, 85525), (140, 85534), (147, 85555),

Gene: HedwigODU_57 Start: 39985, Stop: 40539, Start Num: 31

Candidate Starts for HedwigODU_57:

(Start: 31 @39985 has 106 MA's), (Start: 39 @39997 has 4 MA's), (Start: 41 @40003 has 3 MA's), (49, 40051), (59, 40099), (60, 40108), (69, 40147), (72, 40177), (75, 40192), (83, 40228), (112, 40315), (123, 40339), (126, 40363), (137, 40411), (140, 40426), (146, 40444),

Gene: Heftyboy_53 Start: 39361, Stop: 40140, Start Num: 7

Candidate Starts for Heftyboy_53:

(Start: 7 @39361 has 12 MA's), (16, 39409), (17, 39415), (Start: 39 @39484 has 4 MA's), (51, 39550), (59, 39583), (65, 39607), (70, 39637), (72, 39661), (75, 39676), (86, 39721), (88, 39736), (93, 39772), (94, 39775), (95, 39784), (97, 39790), (101, 39802), (110, 39835), (123, 39874), (127, 39904), (142, 39973), (148, 39985), (166, 40057), (183, 40111), (184, 40126),

Gene: Hidrated_148 Start: 84707, Stop: 85249, Start Num: 29

Candidate Starts for Hidrated_148:

(27, 84701), (29, 84707), (Start: 32 @84713 has 75 MA's), (Start: 39 @84725 has 4 MA's), (40, 84728), (42, 84734), (49, 84776), (65, 84848), (83, 84956), (86, 84965), (88, 84980), (117, 85031), (130, 85088), (140, 85130), (146, 85148), (147, 85151), (166, 85223),

Gene: Hilltopfarm_56 Start: 41966, Stop: 42562, Start Num: 32

Candidate Starts for Hilltopfarm_56:

(Start: 32 @41966 has 75 MA's), (Start: 41 @41984 has 3 MA's), (42, 41987), (43, 41993), (65, 42104), (72, 42158), (75, 42173), (83, 42209), (86, 42218), (87, 42221), (93, 42269), (98, 42272), (107, 42302), (126, 42368), (130, 42389), (170, 42536), (177, 42551),

Gene: HokkenD_154 Start: 86274, Stop: 86867, Start Num: 19

Candidate Starts for HokkenD_154:

(Start: 14 @86256 has 4 MA's), (Start: 19 @86274 has 4 MA's), (Start: 32 @86331 has 75 MA's), (Start: 41 @86349 has 3 MA's), (72, 86520), (74, 86532), (86, 86583), (88, 86598), (140, 86748), (146, 86766), (147, 86769),

Gene: Homura_57 Start: 40104, Stop: 40658, Start Num: 31

Candidate Starts for Homura_57:

(6, 39957), (Start: 31 @40104 has 106 MA's), (Start: 39 @40116 has 4 MA's), (Start: 41 @40122 has 3 MA's), (49, 40170), (59, 40218), (60, 40227), (69, 40266), (72, 40296), (83, 40347), (112, 40434), (123, 40458), (140, 40545), (146, 40563), (148, 40569),

Gene: Hughesyang_159 Start: 85284, Stop: 85820, Start Num: 32

Candidate Starts for Hughesyang_159:

(Start: 32 @85284 has 75 MA's), (Start: 41 @85302 has 3 MA's), (42, 85305), (Start: 48 @85344 has 1 MA's), (49, 85347), (72, 85473), (74, 85485), (86, 85536), (88, 85551), (117, 85602), (130, 85659), (164, 85785), (166, 85794),

Gene: Hurricane_57 Start: 40251, Stop: 40808, Start Num: 32

Candidate Starts for Hurricane_57:

(15, 40182), (Start: 32 @40251 has 75 MA's), (Start: 39 @40263 has 4 MA's), (Start: 41 @40269 has 3 MA's), (49, 40314), (57, 40353), (58, 40356), (65, 40386), (69, 40410), (72, 40440), (121, 40599), (146, 40713), (160, 40764), (163, 40776),

Gene: Hyperbowlee_57 Start: 40301, Stop: 40855, Start Num: 31

Candidate Starts for Hyperbowlee_57:

(6, 40154), (Start: 31 @40301 has 106 MA's), (Start: 39 @40313 has 4 MA's), (Start: 41 @40319 has 3 MA's), (49, 40367), (59, 40415), (60, 40424), (69, 40463), (72, 40493), (83, 40544), (112, 40631), (123, 40655), (140, 40742), (146, 40760), (148, 40766),

Gene: Illumine_60 Start: 40744, Stop: 41316, Start Num: 31

Candidate Starts for Illumine_60:

(Start: 31 @40744 has 106 MA's), (Start: 39 @40756 has 4 MA's), (Start: 41 @40762 has 3 MA's), (49, 40810), (59, 40858), (60, 40867), (68, 40900), (69, 40906), (83, 40987), (123, 41110), (140, 41197), (146, 41215), (171, 41305),

Gene: Inky_57 Start: 40104, Stop: 40658, Start Num: 31

Candidate Starts for Inky_57:

(6, 39957), (Start: 31 @40104 has 106 MA's), (Start: 39 @40116 has 4 MA's), (Start: 41 @40122 has 3 MA's), (49, 40170), (59, 40218), (60, 40227), (69, 40266), (72, 40296), (83, 40347), (112, 40434), (123, 40458), (140, 40545), (146, 40563), (148, 40569),

Gene: JAWS_57 Start: 39971, Stop: 40525, Start Num: 31

Candidate Starts for JAWS_57:

(Start: 31 @39971 has 106 MA's), (Start: 39 @39983 has 4 MA's), (Start: 41 @39989 has 3 MA's), (49, 40037), (59, 40085), (60, 40094), (69, 40133), (72, 40163), (75, 40178), (83, 40214), (112, 40301), (123, 40325), (126, 40349), (137, 40397), (140, 40412), (146, 40430), (148, 40436), (163, 40493),

Gene: JF1_62 Start: 40319, Stop: 40915, Start Num: 36

Candidate Starts for JF1_62:

(Start: 36 @40319 has 28 MA's), (44, 40361), (60, 40439), (72, 40508), (74, 40520), (86, 40568), (109, 40658), (111, 40661), (123, 40688), (130, 40733), (140, 40775), (145, 40796), (146, 40799), (164, 40880),

Gene: Jada_82 Start: 60050, Stop: 60538, Start Num: 37

Candidate Starts for Jada_82:

(Start: 37 @60050 has 20 MA's), (59, 60155), (74, 60230), (78, 60245), (84, 60266), (87, 60275), (89, 60290), (124, 60362), (128, 60386), (131, 60395), (138, 60419), (151, 60461), (164, 60524), (168, 60533),

Gene: Jarvi_57 Start: 40104, Stop: 40658, Start Num: 31

Candidate Starts for Jarvi_57:

(6, 39957), (Start: 31 @40104 has 106 MA's), (Start: 39 @40116 has 4 MA's), (Start: 41 @40122 has 3 MA's), (49, 40170), (59, 40218), (60, 40227), (69, 40266), (72, 40296), (83, 40347), (112, 40434), (123, 40458), (140, 40545), (146, 40563), (148, 40569),

Gene: Jayhawk_58 Start: 39980, Stop: 40534, Start Num: 31

Candidate Starts for Jayhawk_58:

(Start: 31 @39980 has 106 MA's), (Start: 39 @39992 has 4 MA's), (Start: 41 @39998 has 3 MA's), (49, 40046), (59, 40094), (60, 40103), (69, 40142), (72, 40172), (83, 40223), (112, 40310), (123, 40334), (140, 40421), (146, 40439), (148, 40445),

Gene: Jeanie_26 Start: 15627, Stop: 16337, Start Num: 30

Candidate Starts for Jeanie_26:

(Start: 30 @15627 has 2 MA's), (64, 15783), (70, 15816), (74, 15852), (80, 15879), (81, 15882), (84, 15894), (126, 16020), (129, 16038), (143, 16095), (157, 16143), (161, 16155), (180, 16218), (185, 16284),

Gene: Jeckyll_57 Start: 40104, Stop: 40658, Start Num: 31

Candidate Starts for Jeckyll_57:

(6, 39957), (Start: 31 @40104 has 106 MA's), (Start: 39 @40116 has 4 MA's), (Start: 41 @40122 has 3 MA's), (49, 40170), (59, 40218), (60, 40227), (69, 40266), (72, 40296), (83, 40347), (112, 40434), (123, 40458), (140, 40545), (146, 40563), (148, 40569),

Gene: Joy99_57 Start: 40033, Stop: 40587, Start Num: 31

Candidate Starts for Joy99_57:

(6, 39886), (Start: 31 @40033 has 106 MA's), (Start: 39 @40045 has 4 MA's), (Start: 41 @40051 has 3 MA's), (49, 40099), (59, 40147), (60, 40156), (69, 40195), (72, 40225), (83, 40276), (112, 40363), (123, 40387), (140, 40474), (146, 40492), (148, 40498),

Gene: JuicyJay_154 Start: 85903, Stop: 86514, Start Num: 14

Candidate Starts for JuicyJay_154:

(Start: 14 @85903 has 4 MA's), (Start: 19 @85921 has 4 MA's), (Start: 32 @85978 has 75 MA's), (Start: 41 @85996 has 3 MA's), (72, 86167), (74, 86179), (86, 86230), (88, 86245), (140, 86395), (147, 86416),

Gene: Juliette_64 Start: 40466, Stop: 41062, Start Num: 36

Candidate Starts for Juliette_64:

(Start: 36 @40466 has 28 MA's), (44, 40508), (60, 40586), (72, 40655), (74, 40667), (86, 40715), (123, 40835), (130, 40880), (140, 40922), (145, 40943), (146, 40946), (164, 41027),

Gene: Kalah2_151 Start: 84414, Stop: 84950, Start Num: 32

Candidate Starts for Kalah2_151:

(Start: 32 @84414 has 75 MA's), (Start: 41 @84432 has 3 MA's), (42, 84435), (Start: 48 @84474 has 1 MA's), (49, 84477), (72, 84603), (74, 84615), (86, 84666), (88, 84681), (117, 84732), (130, 84789), (164, 84915), (166, 84924),

Gene: Karp_79 Start: 60446, Stop: 60934, Start Num: 36

Candidate Starts for Karp_79:

(Start: 36 @60446 has 28 MA's), (Start: 48 @60506 has 1 MA's), (73, 60617), (74, 60626), (81, 60650), (85, 60665), (89, 60686), (124, 60758), (128, 60782), (131, 60791), (138, 60815), (151, 60857), (164, 60920), (168, 60929),

Gene: KashFlow_157 Start: 84879, Stop: 85466, Start Num: 32

Candidate Starts for KashFlow_157:

(Start: 14 @84804 has 4 MA's), (Start: 19 @84822 has 4 MA's), (Start: 32 @84879 has 75 MA's), (43, 84906), (50, 84948), (61, 85002), (72, 85068), (87, 85131), (89, 85146), (114, 85230), (138, 85338), (140, 85347), (146, 85365), (147, 85368),

Gene: Kenrey_83 Start: 59731, Stop: 60219, Start Num: 37

Candidate Starts for Kenrey_83:

(Start: 37 @59731 has 20 MA's), (67, 59857), (74, 59911), (84, 59947), (87, 59956), (89, 59971), (124, 60043), (128, 60067), (131, 60076), (132, 60082), (138, 60100), (140, 60109), (151, 60142), (158, 60184), (164, 60205), (168, 60214),

Gene: Keshu_59 Start: 40349, Stop: 40906, Start Num: 32

Candidate Starts for Keshu_59:

(15, 40280), (Start: 32 @40349 has 75 MA's), (Start: 41 @40367 has 3 MA's), (49, 40412), (57, 40451), (59, 40460), (65, 40484), (69, 40508), (121, 40697), (123, 40706), (146, 40811),

Gene: KiSi_61 Start: 40705, Stop: 41262, Start Num: 31

Candidate Starts for KiSi_61:

(24, 40675), (Start: 31 @40705 has 106 MA's), (Start: 39 @40717 has 4 MA's), (50, 40774), (57, 40807), (65, 40840), (74, 40906), (83, 40945), (106, 41023), (123, 41062), (140, 41149), (146, 41167), (155, 41203),

Gene: Klein_158 Start: 82774, Stop: 83310, Start Num: 32

Candidate Starts for Klein_158:

(Start: 32 @82774 has 75 MA's), (Start: 41 @82792 has 3 MA's), (42, 82795), (Start: 48 @82834 has 1 MA's), (49, 82837), (72, 82963), (74, 82975), (86, 83026), (88, 83041), (117, 83092), (130, 83149), (164, 83275), (166, 83284),

Gene: Kraw_62 Start: 40154, Stop: 40750, Start Num: 36

Candidate Starts for Kraw_62:

(Start: 36 @40154 has 28 MA's), (44, 40196), (59, 40265), (60, 40274), (72, 40343), (74, 40355), (86, 40403), (123, 40523), (130, 40568), (140, 40610), (145, 40631), (146, 40634), (164, 40715),

Gene: Krueger_63 Start: 40459, Stop: 41013, Start Num: 32

Candidate Starts for Krueger_63:

(Start: 32 @40459 has 75 MA's), (Start: 39 @40471 has 4 MA's), (Start: 41 @40477 has 3 MA's), (59, 40573), (60, 40582), (65, 40597), (69, 40621), (83, 40702), (112, 40789), (123, 40813), (140, 40900), (154, 40945), (160, 40969), (163, 40981),

Gene: LastHope_60 Start: 39135, Stop: 39701, Start Num: 31

Candidate Starts for LastHope_60:

(23, 39096), (Start: 31 @39135 has 106 MA's), (Start: 39 @39147 has 4 MA's), (Start: 41 @39153 has 3 MA's), (47, 39195), (57, 39240), (59, 39249), (68, 39291), (69, 39297), (83, 39378), (123, 39501), (140, 39588), (146, 39606), (148, 39612), (163, 39669),

Gene: LaterM_58 Start: 40866, Stop: 41420, Start Num: 31

Candidate Starts for LaterM_58:

(Start: 31 @40866 has 106 MA's), (Start: 39 @40878 has 4 MA's), (Start: 41 @40884 has 3 MA's), (49, 40932), (59, 40980), (60, 40989), (69, 41028), (72, 41058), (75, 41073), (83, 41109), (112, 41196), (123, 41220), (140, 41307), (146, 41325), (163, 41388),

Gene: Lavahound_58 Start: 41233, Stop: 41787, Start Num: 32

Candidate Starts for Lavahound_58:

(Start: 32 @41233 has 75 MA's), (Start: 39 @41245 has 4 MA's), (58, 41341), (59, 41347), (60, 41356), (65, 41371), (69, 41395), (83, 41476), (112, 41563), (123, 41587), (140, 41674), (153, 41704), (154, 41719),

Gene: LeMond_61 Start: 40686, Stop: 41243, Start Num: 31

Candidate Starts for LeMond_61:

(24, 40656), (Start: 31 @40686 has 106 MA's), (Start: 39 @40698 has 4 MA's), (50, 40755), (57, 40788), (65, 40821), (74, 40887), (83, 40926), (106, 41004), (123, 41043), (140, 41130), (146, 41148), (155, 41184),

Gene: Lea83_57 Start: 40304, Stop: 40861, Start Num: 32

Candidate Starts for Lea83_57:

(15, 40235), (Start: 32 @40304 has 75 MA's), (Start: 39 @40316 has 4 MA's), (Start: 41 @40322 has 3 MA's), (49, 40367), (57, 40406), (65, 40439), (69, 40463), (72, 40493), (121, 40652), (123, 40661), (146, 40766),

Gene: Lebo14_61 Start: 40421, Stop: 41083, Start Num: 36

Candidate Starts for Lebo14_61:

(Start: 36 @40421 has 28 MA's), (44, 40463), (60, 40541), (72, 40610), (74, 40622), (86, 40670), (91, 40706), (100, 40796), (103, 40805), (123, 40856), (130, 40901), (140, 40943), (145, 40964), (146, 40967), (164, 41048),

Gene: Leston_52 Start: 39118, Stop: 39897, Start Num: 7

Candidate Starts for Leston_52:

(2, 38947), (Start: 7 @39118 has 12 MA's), (8, 39136), (16, 39166), (17, 39172), (Start: 39 @39241 has 4 MA's), (51, 39307), (65, 39364), (70, 39394), (72, 39418), (75, 39433), (86, 39478), (88, 39493), (94, 39532), (101, 39559), (110, 39592), (124, 39646), (142, 39730), (148, 39742), (157, 39781), (166, 39814), (183, 39868), (184, 39883),

Gene: LilPharaoh_49 Start: 37775, Stop: 38326, Start Num: 33

Candidate Starts for LilPharaoh_49:

(3, 37541), (Start: 33 @37775 has 6 MA's), (Start: 41 @37796 has 3 MA's), (47, 37838), (50, 37850), (60, 37901), (69, 37940), (72, 37970), (83, 38021), (123, 38126), (140, 38213), (146, 38231), (148, 38237), (166, 38306),

Gene: Limpid_78 Start: 59407, Stop: 59898, Start Num: 37

Candidate Starts for Limpid_78:

(26, 59383), (Start: 37 @59407 has 20 MA's), (Start: 48 @59467 has 1 MA's), (89, 59647), (92, 59674), (128, 59743), (138, 59776), (158, 59860), (164, 59881),

Gene: LindNT_56 Start: 40200, Stop: 40742, Start Num: 39

Candidate Starts for LindNT_56:

(Start: 31 @40188 has 106 MA's), (Start: 39 @40200 has 4 MA's), (Start: 41 @40206 has 3 MA's), (49, 40254), (59, 40302), (60, 40311), (69, 40350), (72, 40380), (75, 40395), (83, 40431), (112, 40518), (123, 40542), (137, 40614), (140, 40629), (146, 40647), (148, 40653), (163, 40710),

Gene: LittleE_160 Start: 84645, Stop: 85238, Start Num: 19

Candidate Starts for LittleE_160:

(Start: 19 @84645 has 4 MA's), (Start: 32 @84702 has 75 MA's), (Start: 41 @84720 has 3 MA's), (72, 84891), (74, 84903), (86, 84954), (88, 84969), (140, 85119), (147, 85140),

Gene: Llorens_57 Start: 40104, Stop: 40658, Start Num: 31

Candidate Starts for Llorens_57:

(6, 39957), (Start: 31 @40104 has 106 MA's), (Start: 39 @40116 has 4 MA's), (Start: 41 @40122 has 3 MA's), (49, 40170), (59, 40218), (60, 40227), (69, 40266), (72, 40296), (83, 40347), (112, 40434), (123, 40458), (140, 40545), (146, 40563), (148, 40569),

Gene: Lucky2013_150 Start: 79771, Stop: 80307, Start Num: 32

Candidate Starts for Lucky2013_150:

(Start: 32 @79771 has 75 MA's), (Start: 41 @79789 has 3 MA's), (42, 79792), (Start: 48 @79831 has 1 MA's), (49, 79834), (72, 79960), (74, 79972), (86, 80023), (88, 80038), (117, 80089), (130, 80146), (140, 80188), (147, 80209),

Gene: Lunahalos_57 Start: 40104, Stop: 40658, Start Num: 31

Candidate Starts for Lunahalos_57:

(6, 39957), (Start: 31 @40104 has 106 MA's), (Start: 39 @40116 has 4 MA's), (Start: 41 @40122 has 3 MA's), (49, 40170), (59, 40218), (60, 40227), (69, 40266), (72, 40296), (83, 40347), (112, 40434), (123, 40458), (140, 40545), (146, 40563), (148, 40569),

Gene: MacKat_52 Start: 35448, Stop: 36002, Start Num: 31

Candidate Starts for MacKat_52:

(Start: 31 @35448 has 106 MA's), (Start: 39 @35460 has 4 MA's), (Start: 41 @35466 has 3 MA's), (49, 35514), (59, 35562), (60, 35571), (69, 35610), (72, 35640), (75, 35655), (83, 35691), (112, 35778), (123, 35802), (126, 35826), (137, 35874), (140, 35889), (146, 35907), (163, 35970),

Gene: MacnCheese_59 Start: 40831, Stop: 41388, Start Num: 32

Candidate Starts for MacnCheese_59:

(Start: 32 @40831 has 75 MA's), (Start: 39 @40843 has 4 MA's), (Start: 41 @40849 has 3 MA's), (44, 40873), (49, 40894), (57, 40933), (65, 40966), (69, 40990), (77, 41041), (104, 41146), (123, 41188), (146, 41293),

Gene: MalagasyRose_58 Start: 39058, Stop: 39738, Start Num: 28

Candidate Starts for MalagasyRose_58:

(21, 39016), (Start: 28 @39058 has 1 MA's), (Start: 41 @39085 has 3 MA's), (42, 39088), (50, 39136), (59, 39178), (78, 39289), (85, 39313), (86, 39316), (87, 39319), (94, 39370), (96, 39382), (102, 39397), (118, 39442), (123, 39460), (124, 39475), (134, 39520), (140, 39547), (144, 39565), (159, 39619), (162, 39631), (167, 39649), (176, 39673), (178, 39679), (182, 39703),

Gene: Malthus_63 Start: 40154, Stop: 40750, Start Num: 36

Candidate Starts for Malthus_63:

(Start: 36 @40154 has 28 MA's), (44, 40196), (59, 40265), (60, 40274), (72, 40343), (74, 40355), (86, 40403), (123, 40523), (130, 40568), (140, 40610), (145, 40631), (146, 40634), (164, 40715),

Gene: Marcoliusprime_60 Start: 42031, Stop: 42564, Start Num: 32

Candidate Starts for Marcoliusprime_60:

(21, 41980), (Start: 32 @42031 has 75 MA's), (40, 42046), (49, 42094), (59, 42142), (60, 42151), (68, 42184), (69, 42190), (70, 42196), (86, 42280), (105, 42346),

Gene: MarkPhew_60 Start: 40383, Stop: 40940, Start Num: 31

Candidate Starts for MarkPhew_60:

(Start: 31 @40383 has 106 MA's), (Start: 39 @40395 has 4 MA's), (47, 40440), (50, 40452), (57, 40485), (60, 40503), (65, 40518), (74, 40584), (83, 40623), (123, 40740), (132, 40794), (140, 40827),

Gene: Marleymoo_144 Start: 82634, Stop: 83152, Start Num: 39

Candidate Starts for Marleymoo_144:

(27, 82610), (29, 82616), (Start: 32 @82622 has 75 MA's), (Start: 39 @82634 has 4 MA's), (40, 82637), (42, 82643), (49, 82685), (65, 82757), (83, 82865), (86, 82874), (88, 82889), (117, 82940), (130, 82997), (164, 83123), (172, 83144),

Gene: Marshawn_58 Start: 40229, Stop: 40783, Start Num: 31

Candidate Starts for Marshawn_58:

(Start: 31 @40229 has 106 MA's), (Start: 39 @40241 has 4 MA's), (47, 40286), (50, 40298), (59, 40340), (60, 40349), (65, 40364), (70, 40394), (72, 40418), (74, 40430), (79, 40454), (83, 40469), (112, 40559), (123, 40583), (140, 40670), (146, 40688), (155, 40724),

Gene: MaryV_122 Start: 63041, Stop: 63556, Start Num: 37

Candidate Starts for MaryV_122:

(Start: 37 @63041 has 20 MA's), (Start: 41 @63056 has 3 MA's), (44, 63080), (45, 63086), (50, 63107), (53, 63125), (56, 63137), (57, 63140), (69, 63197), (74, 63239), (86, 63287), (87, 63290), (93, 63338), (98, 63341), (122, 63359), (131, 63410), (140, 63449), (142, 63461), (155, 63506),

Gene: Maupel_81 Start: 59537, Stop: 60025, Start Num: 37

Candidate Starts for Maupel_81:

(Start: 37 @59537 has 20 MA's), (59, 59642), (74, 59717), (78, 59732), (84, 59753), (87, 59762), (89, 59777), (124, 59849), (128, 59873), (131, 59882), (138, 59906), (151, 59948), (164, 60011), (168, 60020),

Gene: McGonagall_26 Start: 15628, Stop: 16338, Start Num: 30

Candidate Starts for McGonagall_26:

(Start: 30 @15628 has 2 MA's), (64, 15784), (70, 15817), (74, 15853), (80, 15880), (81, 15883), (84, 15895), (126, 16021), (129, 16039), (143, 16096), (157, 16144), (161, 16156), (180, 16219), (185, 16285),

Gene: McMater_60 Start: 40625, Stop: 41188, Start Num: 31

Candidate Starts for McMater_60:

(Start: 31 @40625 has 106 MA's), (50, 40700), (59, 40742), (60, 40751), (68, 40784), (69, 40790), (83, 40871), (123, 40988), (140, 41075), (146, 41093), (155, 41129), (166, 41168),

Gene: Mdavu_50 Start: 38057, Stop: 38587, Start Num: 41

Candidate Starts for Mdavu_50:

(3, 37802), (Start: 33 @38036 has 6 MA's), (Start: 41 @38057 has 3 MA's), (47, 38099), (50, 38111), (60, 38162), (69, 38201), (72, 38231), (83, 38282), (123, 38387), (140, 38474), (146, 38492), (148, 38498), (166, 38567),

Gene: MeaningOfLife_58 Start: 40859, Stop: 41413, Start Num: 31

Candidate Starts for MeaningOfLife_58:

(Start: 31 @40859 has 106 MA's), (Start: 39 @40871 has 4 MA's), (49, 40925), (59, 40973), (60, 40982), (69, 41021), (72, 41051), (83, 41102), (112, 41189), (123, 41213), (140, 41300), (146, 41318), (148, 41324), (164, 41384),

Gene: MeganTheeKilla_80 Start: 58898, Stop: 59386, Start Num: 37

Candidate Starts for MeganTheeKilla_80:

(Start: 37 @58898 has 20 MA's), (59, 59003), (74, 59078), (78, 59093), (84, 59114), (87, 59123), (89, 59138), (124, 59210), (128, 59234), (131, 59243), (138, 59267), (151, 59309), (164, 59372), (168, 59381),

Gene: Megsy_59 Start: 40253, Stop: 40807, Start Num: 31

Candidate Starts for Megsy_59:

(Start: 31 @40253 has 106 MA's), (Start: 39 @40265 has 4 MA's), (Start: 41 @40271 has 3 MA's), (49, 40319), (59, 40367), (60, 40376), (69, 40415), (72, 40445), (75, 40460), (83, 40496), (112, 40583), (123, 40607), (140, 40694), (146, 40712), (148, 40718),

Gene: MiaZeal_157 Start: 80918, Stop: 81454, Start Num: 32

Candidate Starts for MiaZeal_157:

(Start: 32 @80918 has 75 MA's), (Start: 41 @80936 has 3 MA's), (42, 80939), (Start: 48 @80978 has 1 MA's), (49, 80981), (72, 81107), (74, 81119), (86, 81170), (88, 81185), (117, 81236), (130, 81293), (140, 81335), (147, 81356),

Gene: Milly_60 Start: 42004, Stop: 42537, Start Num: 32

Candidate Starts for Milly_60:

(21, 41953), (Start: 32 @42004 has 75 MA's), (40, 42019), (49, 42067), (59, 42115), (60, 42124), (68, 42157), (69, 42163), (70, 42169), (86, 42253), (105, 42319),

Gene: Minerva_158 Start: 84013, Stop: 84549, Start Num: 32

Candidate Starts for Minerva_158:

(Start: 32 @84013 has 75 MA's), (Start: 41 @84031 has 3 MA's), (42, 84034), (72, 84202), (74, 84214), (86, 84265), (88, 84280), (140, 84430), (166, 84523),

Gene: Miryou_55 Start: 41320, Stop: 42108, Start Num: 7

Candidate Starts for Miryou_55:

(2, 41149), (Start: 7 @41320 has 12 MA's), (8, 41338), (16, 41368), (17, 41374), (Start: 39 @41443 has 4 MA's), (51, 41509), (65, 41566), (70, 41596), (72, 41620), (75, 41635), (86, 41680), (88, 41695), (93, 41731), (94, 41734), (95, 41743), (101, 41761), (110, 41794), (124, 41848), (127, 41863), (142, 41932), (146, 41938), (148, 41944), (152, 41950), (166, 42016), (184, 42085),

Gene: Mitti_62 Start: 40333, Stop: 40929, Start Num: 36

Candidate Starts for Mitti_62:

(Start: 36 @40333 has 28 MA's), (44, 40375), (60, 40453), (72, 40522), (74, 40534), (86, 40582), (123, 40702), (130, 40747), (140, 40789), (145, 40810), (146, 40813), (164, 40894),

Gene: Moab_81 Start: 60787, Stop: 61275, Start Num: 37

Candidate Starts for Moab_81:

(Start: 37 @60787 has 20 MA's), (Start: 48 @60847 has 1 MA's), (65, 60904), (74, 60967), (89, 61027), (90, 61030), (124, 61099), (128, 61123), (131, 61132), (138, 61156), (151, 61198), (164, 61261), (168, 61270),

Gene: Mufasa_60 Start: 41594, Stop: 42127, Start Num: 32

Candidate Starts for Mufasa_60:

(Start: 32 @41594 has 75 MA's), (40, 41609), (49, 41657), (59, 41705), (60, 41714), (68, 41747), (69, 41753), (70, 41759), (86, 41843), (105, 41909),

Gene: Muntaha_74 Start: 59541, Stop: 60032, Start Num: 36

Candidate Starts for Muntaha_74:

(Start: 36 @59541 has 28 MA's), (42, 59562), (Start: 48 @59604 has 1 MA's), (65, 59661), (67, 59670), (87, 59769), (89, 59784), (128, 59880), (135, 59904), (138, 59913), (141, 59931), (145, 59943), (168,

60027),

Gene: Murucutumbu_58 Start: 40959, Stop: 41513, Start Num: 31

Candidate Starts for Murucutumbu_58:

(Start: 31 @40959 has 106 MA's), (Start: 39 @40971 has 4 MA's), (Start: 41 @40977 has 3 MA's), (49, 41025), (59, 41073), (60, 41082), (69, 41121), (72, 41151), (112, 41289), (123, 41313), (137, 41385), (140, 41400), (146, 41418), (148, 41424), (163, 41481),

Gene: Mynx_58 Start: 40301, Stop: 40855, Start Num: 31

Candidate Starts for Mynx_58:

(Start: 31 @40301 has 106 MA's), (Start: 39 @40313 has 4 MA's), (Start: 41 @40319 has 3 MA's), (49, 40367), (59, 40415), (60, 40424), (69, 40463), (72, 40493), (75, 40508), (83, 40544), (112, 40631), (123, 40655), (126, 40679), (137, 40727), (140, 40742), (146, 40760), (148, 40766), (163, 40823),

Gene: Nebkiss_120 Start: 65950, Stop: 66495, Start Num: 32

Candidate Starts for Nebkiss_120:

(Start: 32 @65950 has 75 MA's), (49, 66013), (69, 66109), (72, 66139), (74, 66151), (83, 66193), (89, 66220), (125, 66313), (128, 66334), (138, 66367), (140, 66376), (146, 66394), (154, 66421), (164, 66460), (174, 66487),

Gene: Nekros_156 Start: 84379, Stop: 84915, Start Num: 32

Candidate Starts for Nekros_156:

(Start: 19 @84322 has 4 MA's), (Start: 32 @84379 has 75 MA's), (Start: 41 @84397 has 3 MA's), (72, 84568), (74, 84580), (86, 84631), (88, 84646), (140, 84796), (147, 84817),

Gene: Nibb_59 Start: 40078, Stop: 40635, Start Num: 31

Candidate Starts for Nibb_59:

(Start: 31 @40078 has 106 MA's), (Start: 39 @40090 has 4 MA's), (50, 40147), (57, 40180), (60, 40198), (65, 40213), (74, 40279), (83, 40318), (87, 40330), (123, 40435), (140, 40522),

Gene: Nibley_151 Start: 80945, Stop: 81532, Start Num: 32

Candidate Starts for Nibley_151:

(Start: 14 @80870 has 4 MA's), (Start: 19 @80888 has 4 MA's), (Start: 32 @80945 has 75 MA's), (43, 80972), (50, 81014), (61, 81068), (72, 81134), (87, 81197), (89, 81212), (114, 81296), (138, 81404), (140, 81413), (146, 81431), (147, 81434),

Gene: NihilNomen_161 Start: 84104, Stop: 84640, Start Num: 32

Candidate Starts for NihilNomen_161:

(Start: 14 @84029 has 4 MA's), (Start: 19 @84047 has 4 MA's), (Start: 32 @84104 has 75 MA's), (Start: 41 @84122 has 3 MA's), (72, 84293), (74, 84305), (86, 84356), (88, 84371), (140, 84521), (147, 84542),

Gene: Nikao_52 Start: 40681, Stop: 41211, Start Num: 41

Candidate Starts for Nikao_52:

(3, 40426), (Start: 33 @40660 has 6 MA's), (Start: 41 @40681 has 3 MA's), (47, 40723), (50, 40735), (60, 40786), (69, 40825), (72, 40855), (83, 40906), (123, 41011), (140, 41098), (146, 41116), (148, 41122), (166, 41191),

Gene: Niklas_60 Start: 40686, Stop: 41249, Start Num: 31

Candidate Starts for Niklas_60:

(Start: 31 @40686 has 106 MA's), (50, 40761), (59, 40803), (60, 40812), (68, 40845), (69, 40851), (83, 40932), (123, 41049), (140, 41136), (146, 41154), (155, 41190), (166, 41229),

Gene: November_56 Start: 40462, Stop: 41016, Start Num: 32

Candidate Starts for November_56:

(Start: 32 @40462 has 75 MA's), (49, 40525), (57, 40564), (59, 40573), (60, 40582), (62, 40588), (65, 40597), (74, 40663), (83, 40702), (86, 40711), (112, 40792), (123, 40816), (140, 40903), (146, 40921), (154, 40948), (163, 40984),

Gene: Nutello_49 Start: 38047, Stop: 38598, Start Num: 33

Candidate Starts for Nutello_49:

(3, 37813), (Start: 33 @38047 has 6 MA's), (Start: 41 @38068 has 3 MA's), (47, 38110), (50, 38122), (60, 38173), (69, 38212), (72, 38242), (83, 38293), (123, 38398), (140, 38485), (146, 38503), (148, 38509), (166, 38578),

Gene: Odette_164 Start: 87031, Stop: 87573, Start Num: 29

Candidate Starts for Odette_164:

(27, 87025), (29, 87031), (Start: 32 @87037 has 75 MA's), (Start: 39 @87049 has 4 MA's), (40, 87052), (42, 87058), (49, 87100), (65, 87172), (72, 87226), (74, 87238), (86, 87289), (88, 87304), (117, 87355), (140, 87454), (147, 87475),

Gene: OkiRoe_52 Start: 39114, Stop: 39779, Start Num: 39

Candidate Starts for OkiRoe_52:

(2, 38820), (Start: 7 @38991 has 12 MA's), (8, 39009), (16, 39039), (17, 39045), (Start: 39 @39114 has 4 MA's), (51, 39180), (65, 39237), (70, 39267), (72, 39291), (75, 39306), (86, 39351), (88, 39366), (93, 39402), (94, 39405), (95, 39414), (101, 39432), (110, 39465), (124, 39519), (127, 39534), (142, 39603), (146, 39609), (148, 39615), (152, 39621), (166, 39687), (184, 39756),

Gene: Omega_164 Start: 85807, Stop: 86343, Start Num: 32

Candidate Starts for Omega_164:

(Start: 32 @85807 has 75 MA's), (Start: 41 @85825 has 3 MA's), (42, 85828), (Start: 48 @85867 has 1 MA's), (49, 85870), (72, 85996), (74, 86008), (86, 86059), (88, 86074), (117, 86125), (130, 86182), (166, 86317),

Gene: OmniCritical_61 Start: 40142, Stop: 40819, Start Num: 36

Candidate Starts for OmniCritical_61:

(Start: 36 @40142 has 28 MA's), (44, 40184), (60, 40262), (72, 40331), (74, 40343), (86, 40391), (91, 40427), (100, 40517), (103, 40526), (123, 40577), (130, 40622), (135, 40646), (140, 40664), (145, 40685), (146, 40688), (149, 40700), (150, 40703), (164, 40784),

Gene: Omnicron_56 Start: 39478, Stop: 40266, Start Num: 7

Candidate Starts for Omnicron_56:

(Start: 7 @39478 has 12 MA's), (12, 39514), (13, 39517), (Start: 39 @39613 has 4 MA's), (57, 39703), (59, 39712), (65, 39736), (75, 39805), (86, 39850), (93, 39901), (98, 39925), (99, 39928), (104, 39943), (134, 40060), (135, 40069), (138, 40078), (140, 40087), (142, 40099), (154, 40132), (166, 40180), (179, 40213),

Gene: Optimus_151 Start: 83303, Stop: 83839, Start Num: 32

Candidate Starts for Optimus_151:

(Start: 32 @83303 has 75 MA's), (Start: 41 @83321 has 3 MA's), (42, 83324), (Start: 48 @83363 has 1 MA's), (49, 83366), (72, 83492), (74, 83504), (86, 83555), (88, 83570), (117, 83621), (130, 83678), (164, 83804), (166, 83813),

Gene: Oscar_61 Start: 40591, Stop: 41148, Start Num: 31

Candidate Starts for Oscar_61:

(9, 40498), (24, 40561), (Start: 31 @40591 has 106 MA's), (Start: 39 @40603 has 4 MA's), (50, 40660), (57, 40693), (65, 40726), (70, 40756), (74, 40792), (83, 40831), (106, 40909), (123, 40948), (140, 41035), (146, 41053), (155, 41089),

Gene: Padfoot_57 Start: 40301, Stop: 40855, Start Num: 31

Candidate Starts for Padfoot_57:

(6, 40154), (Start: 31 @40301 has 106 MA's), (Start: 39 @40313 has 4 MA's), (Start: 41 @40319 has 3 MA's), (49, 40367), (59, 40415), (60, 40424), (69, 40463), (72, 40493), (83, 40544), (112, 40631), (123, 40655), (140, 40742), (146, 40760), (148, 40766),

Gene: Padpat_59 Start: 39982, Stop: 40536, Start Num: 31

Candidate Starts for Padpat_59:

(Start: 31 @39982 has 106 MA's), (Start: 39 @39994 has 4 MA's), (Start: 41 @40000 has 3 MA's), (49, 40048), (59, 40096), (60, 40105), (69, 40144), (72, 40174), (83, 40225), (112, 40312), (123, 40336), (140, 40423), (148, 40447),

Gene: Paola_52 Start: 38989, Stop: 39768, Start Num: 7

Candidate Starts for Paola_52:

(Start: 7 @38989 has 12 MA's), (8, 39007), (16, 39037), (17, 39043), (Start: 39 @39112 has 4 MA's), (51, 39178), (65, 39235), (70, 39265), (72, 39289), (75, 39304), (86, 39349), (88, 39364), (94, 39403), (101, 39430), (110, 39463), (124, 39517), (142, 39601), (148, 39613), (157, 39652), (166, 39685), (183, 39739),

Gene: Patelgo_81 Start: 60950, Stop: 61438, Start Num: 37

Candidate Starts for Patelgo_81:

(Start: 37 @60950 has 20 MA's), (Start: 48 @61010 has 1 MA's), (65, 61067), (74, 61130), (89, 61190), (90, 61193), (124, 61262), (128, 61286), (131, 61295), (138, 61319), (151, 61361), (164, 61424), (168, 61433),

Gene: Peanam_60 Start: 40644, Stop: 41207, Start Num: 31

Candidate Starts for Peanam_60:

(Start: 31 @40644 has 106 MA's), (50, 40719), (59, 40761), (60, 40770), (68, 40803), (69, 40809), (83, 40890), (123, 41007), (140, 41094), (146, 41112), (155, 41148), (166, 41187),

Gene: Peel_57 Start: 40106, Stop: 40660, Start Num: 31

Candidate Starts for Peel_57:

(6, 39959), (Start: 31 @40106 has 106 MA's), (Start: 39 @40118 has 4 MA's), (Start: 41 @40124 has 3 MA's), (49, 40172), (59, 40220), (60, 40229), (69, 40268), (72, 40298), (83, 40349), (112, 40436), (123, 40460), (140, 40547), (146, 40565), (148, 40571),

Gene: Pharb_56 Start: 39453, Stop: 40010, Start Num: 32

Candidate Starts for Pharb_56:

(Start: 32 @39453 has 75 MA's), (Start: 41 @39471 has 3 MA's), (49, 39516), (57, 39555), (59, 39564), (65, 39588), (69, 39612), (112, 39783), (123, 39810), (146, 39915),

Gene: PhelpsODU_58 Start: 39396, Stop: 39959, Start Num: 31

Candidate Starts for PhelpsODU_58:

(15, 39327), (Start: 31 @39396 has 106 MA's), (Start: 39 @39408 has 4 MA's), (Start: 41 @39414 has 3 MA's), (59, 39510), (65, 39534), (69, 39558), (83, 39639), (113, 39729), (123, 39759), (140, 39846), (146, 39864), (163, 39927),

Gene: Phoebus_160 Start: 87716, Stop: 88327, Start Num: 14

Candidate Starts for Phoebus_160:

(Start: 14 @87716 has 4 MA's), (Start: 19 @87734 has 4 MA's), (Start: 32 @87791 has 75 MA's), (Start: 41 @87809 has 3 MA's), (72, 87980), (74, 87992), (86, 88043), (88, 88058), (140, 88208), (147, 88229),

Gene: Phrank_60 Start: 39457, Stop: 40020, Start Num: 31

Candidate Starts for Phrank_60:

(Start: 31 @39457 has 106 MA's), (Start: 39 @39469 has 4 MA's), (Start: 41 @39475 has 3 MA's), (59, 39571), (69, 39619), (83, 39700), (113, 39790), (123, 39820), (140, 39907), (146, 39925), (163, 39988),

Gene: Phredrick_81 Start: 58811, Stop: 59299, Start Num: 37

Candidate Starts for Phredrick_81:

(Start: 37 @58811 has 20 MA's), (67, 58937), (74, 58991), (84, 59027), (87, 59036), (89, 59051), (124, 59123), (128, 59147), (131, 59156), (132, 59162), (138, 59180), (140, 59189), (151, 59222), (158, 59264), (164, 59285), (168, 59294),

Gene: Piatt_57 Start: 40301, Stop: 40855, Start Num: 31

Candidate Starts for Piatt_57:

(6, 40154), (Start: 31 @40301 has 106 MA's), (Start: 39 @40313 has 4 MA's), (Start: 41 @40319 has 3 MA's), (49, 40367), (59, 40415), (60, 40424), (69, 40463), (72, 40493), (83, 40544), (112, 40631), (123, 40655), (140, 40742), (146, 40760), (148, 40766),

Gene: Pisa1_57 Start: 40964, Stop: 41518, Start Num: 31

Candidate Starts for Pisa1_57:

(Start: 31 @40964 has 106 MA's), (Start: 39 @40976 has 4 MA's), (Start: 41 @40982 has 3 MA's), (49, 41030), (59, 41078), (60, 41087), (69, 41126), (72, 41156), (83, 41207), (112, 41294), (123, 41318), (140, 41405), (146, 41423), (148, 41429),

Gene: Pisa4_51 Start: 36333, Stop: 36887, Start Num: 31

Candidate Starts for Pisa4_51:

(Start: 31 @36333 has 106 MA's), (Start: 39 @36345 has 4 MA's), (Start: 41 @36351 has 3 MA's), (49, 36399), (59, 36447), (60, 36456), (69, 36495), (72, 36525), (83, 36576), (112, 36663), (123, 36687), (140, 36774), (146, 36792), (148, 36798),

Gene: Pixie_56 Start: 39789, Stop: 40346, Start Num: 32

Candidate Starts for Pixie_56:

(15, 39720), (Start: 32 @39789 has 75 MA's), (Start: 39 @39801 has 4 MA's), (Start: 41 @39807 has 3 MA's), (49, 39852), (57, 39891), (58, 39894), (65, 39924), (69, 39948), (72, 39978), (121, 40137), (123, 40146), (146, 40251), (160, 40302), (163, 40314),

Gene: Pokerus_56 Start: 40031, Stop: 40585, Start Num: 31

Candidate Starts for Pokerus_56:

(Start: 31 @40031 has 106 MA's), (Start: 39 @40043 has 4 MA's), (49, 40097), (59, 40145), (60, 40154), (69, 40193), (72, 40223), (83, 40274), (112, 40361), (123, 40385), (140, 40472), (146, 40490), (148, 40496),

Gene: Porcelain_154 Start: 80717, Stop: 81253, Start Num: 32

Candidate Starts for Porcelain_154:

(Start: 32 @80717 has 75 MA's), (Start: 41 @80735 has 3 MA's), (42, 80738), (Start: 48 @80777 has 1 MA's), (49, 80780), (72, 80906), (74, 80918), (86, 80969), (88, 80984), (117, 81035), (130, 81092), (140, 81134), (147, 81155),

Gene: Pound_151 Start: 82794, Stop: 83378, Start Num: 32

Candidate Starts for Pound_151:

(Start: 14 @82719 has 4 MA's), (Start: 19 @82737 has 4 MA's), (Start: 32 @82794 has 75 MA's), (43, 82821), (50, 82863), (61, 82917), (72, 82983), (87, 83046), (89, 83061), (114, 83145), (138, 83253), (140, 83262), (146, 83280),

Gene: Prithvi_58 Start: 40200, Stop: 40742, Start Num: 39

Candidate Starts for Prithvi_58:

(Start: 31 @40188 has 106 MA's), (Start: 39 @40200 has 4 MA's), (Start: 41 @40206 has 3 MA's), (49, 40254), (59, 40302), (60, 40311), (69, 40350), (72, 40380), (75, 40395), (83, 40431), (112, 40518), (123, 40542), (137, 40614), (140, 40629), (146, 40647), (148, 40653), (163, 40710),

Gene: Qhanda_64 Start: 40170, Stop: 40766, Start Num: 36

Candidate Starts for Qhanda_64:

(Start: 36 @40170 has 28 MA's), (44, 40212), (60, 40290), (72, 40359), (74, 40371), (86, 40419), (123, 40539), (130, 40584), (140, 40626), (145, 40647), (146, 40650), (164, 40731),

Gene: QuincyRose_56 Start: 40365, Stop: 40919, Start Num: 31

Candidate Starts for QuincyRose_56:

(6, 40215), (Start: 31 @40365 has 106 MA's), (Start: 39 @40377 has 4 MA's), (Start: 41 @40383 has 3 MA's), (49, 40431), (59, 40479), (60, 40488), (69, 40527), (72, 40557), (83, 40608), (112, 40695), (123, 40719), (140, 40806), (146, 40824), (148, 40830),

Gene: Ramen_58 Start: 39987, Stop: 40541, Start Num: 31

Candidate Starts for Ramen_58:

(Start: 31 @39987 has 106 MA's), (Start: 39 @39999 has 4 MA's), (Start: 41 @40005 has 3 MA's), (49, 40053), (59, 40101), (60, 40110), (69, 40149), (72, 40179), (75, 40194), (83, 40230), (112, 40317), (123, 40341), (126, 40365), (137, 40413), (140, 40428), (146, 40446),

Gene: Rando14_54 Start: 37175, Stop: 37963, Start Num: 7

Candidate Starts for Rando14_54:

(Start: 7 @37175 has 12 MA's), (18, 37235), (22, 37244), (Start: 39 @37310 has 4 MA's), (57, 37400), (59, 37409), (65, 37433), (75, 37502), (86, 37547), (87, 37550), (95, 37610), (98, 37622), (99, 37625), (104, 37640), (134, 37757), (138, 37775), (140, 37784), (142, 37796), (148, 37808), (154, 37829), (166, 37877), (179, 37910),

Gene: Rapunzel97_58 Start: 39980, Stop: 40534, Start Num: 31

Candidate Starts for Rapunzel97_58:

(Start: 31 @39980 has 106 MA's), (Start: 39 @39992 has 4 MA's), (Start: 41 @39998 has 3 MA's), (49, 40046), (59, 40094), (60, 40103), (69, 40142), (72, 40172), (83, 40223), (112, 40310), (123, 40334), (140, 40421), (146, 40439), (148, 40445),

Gene: Rearden_152 Start: 81615, Stop: 82151, Start Num: 32

Candidate Starts for Rearden_152:

(Start: 19 @81558 has 4 MA's), (Start: 32 @81615 has 75 MA's), (Start: 41 @81633 has 3 MA's), (72, 81804), (74, 81816), (86, 81867), (88, 81882), (140, 82032), (146, 82050), (147, 82053),

Gene: Redno2_153 Start: 81847, Stop: 82440, Start Num: 19

Candidate Starts for Redno2_153:

(Start: 14 @81829 has 4 MA's), (Start: 19 @81847 has 4 MA's), (Start: 32 @81904 has 75 MA's), (Start: 41 @81922 has 3 MA's), (72, 82093), (74, 82105), (86, 82156), (88, 82171), (140, 82321), (147, 82342),

Gene: Richo_60 Start: 40625, Stop: 41188, Start Num: 31

Candidate Starts for Richo_60:

(Start: 31 @40625 has 106 MA's), (50, 40700), (59, 40742), (60, 40751), (68, 40784), (69, 40790), (83, 40871), (123, 40988), (140, 41075), (146, 41093), (155, 41129), (166, 41168),

Gene: Rosmarinus_57 Start: 40092, Stop: 40646, Start Num: 31

Candidate Starts for Rosmarinus_57:

(6, 39945), (Start: 31 @40092 has 106 MA's), (Start: 39 @40104 has 4 MA's), (Start: 41 @40110 has 3 MA's), (49, 40158), (59, 40206), (60, 40215), (69, 40254), (72, 40284), (83, 40335), (112, 40422), (123, 40446), (140, 40533), (146, 40551), (148, 40557),

Gene: Ruthiejr_63 Start: 40204, Stop: 40800, Start Num: 36

Candidate Starts for Ruthiejr_63:

(Start: 36 @40204 has 28 MA's), (44, 40246), (60, 40324), (72, 40393), (74, 40405), (86, 40453), (123, 40573), (130, 40618), (140, 40660), (145, 40681), (146, 40684), (164, 40765),

Gene: SamScheppers_60 Start: 40633, Stop: 41229, Start Num: 36

Candidate Starts for SamScheppers_60:

(Start: 36 @40633 has 28 MA's), (44, 40675), (60, 40753), (72, 40822), (74, 40834), (86, 40882), (123, 41002), (130, 41047), (140, 41089), (145, 41110), (146, 41113), (164, 41194),

Gene: SamuelLPlaqson_58 Start: 40885, Stop: 41439, Start Num: 31

Candidate Starts for SamuelLPlaqson_58:

(Start: 31 @40885 has 106 MA's), (Start: 39 @40897 has 4 MA's), (Start: 41 @40903 has 3 MA's), (49, 40951), (59, 40999), (60, 41008), (69, 41047), (83, 41128), (112, 41215), (123, 41239), (140, 41326), (146, 41344), (148, 41350),

Gene: Scarlett_61 Start: 40586, Stop: 41143, Start Num: 31

Candidate Starts for Scarlett_61:

(24, 40556), (Start: 31 @40586 has 106 MA's), (Start: 39 @40598 has 4 MA's), (50, 40655), (57, 40688), (65, 40721), (70, 40751), (74, 40787), (106, 40904), (123, 40943), (140, 41030), (146, 41048), (155, 41084),

Gene: Schatzie_155 Start: 85091, Stop: 85627, Start Num: 32

Candidate Starts for Schatzie_155:

(27, 85079), (29, 85085), (Start: 32 @85091 has 75 MA's), (Start: 39 @85103 has 4 MA's), (40, 85106), (42, 85112), (49, 85154), (65, 85226), (83, 85334), (86, 85343), (88, 85358), (117, 85409), (140, 85508), (147, 85529),

Gene: SeresaTree_81 Start: 60167, Stop: 60667, Start Num: 32

Candidate Starts for SeresaTree_81:

(Start: 32 @60167 has 75 MA's), (44, 60215), (67, 60302), (85, 60395), (89, 60416), (125, 60491), (128, 60512), (131, 60521), (135, 60536), (138, 60545), (158, 60629), (164, 60650),

Gene: SgtBeansprout_49 Start: 38068, Stop: 38598, Start Num: 41

Candidate Starts for SgtBeansprout_49:

(3, 37813), (Start: 33 @38047 has 6 MA's), (Start: 41 @38068 has 3 MA's), (47, 38110), (50, 38122), (60, 38173), (69, 38212), (72, 38242), (83, 38293), (123, 38398), (140, 38485), (146, 38503), (148, 38509), (166, 38578),

Gene: Shaboozey_155 Start: 81389, Stop: 81976, Start Num: 32

Candidate Starts for Shaboozey_155:

(Start: 14 @81314 has 4 MA's), (Start: 19 @81332 has 4 MA's), (Start: 32 @81389 has 75 MA's), (43, 81416), (50, 81458), (61, 81512), (72, 81578), (87, 81641), (89, 81656), (114, 81740), (138, 81848),

(140, 81857), (146, 81875), (147, 81878),

Gene: Shadow1_62 Start: 40304, Stop: 40867, Start Num: 31

Candidate Starts for Shadow1_62:

(Start: 31 @40304 has 106 MA's), (Start: 39 @40316 has 4 MA's), (Start: 41 @40322 has 3 MA's), (47, 40364), (59, 40418), (65, 40442), (69, 40466), (83, 40547), (113, 40637), (123, 40667), (140, 40754), (146, 40772), (163, 40835),

Gene: Sham_75 Start: 59928, Stop: 60419, Start Num: 37

Candidate Starts for Sham_75:

(35, 59925), (Start: 37 @59928 has 20 MA's), (44, 59967), (89, 60168), (128, 60264), (131, 60273), (135, 60288), (138, 60297), (141, 60315), (142, 60318), (158, 60381), (164, 60402),

Gene: Shaobing_60 Start: 40662, Stop: 41225, Start Num: 31

Candidate Starts for Shaobing_60:

(Start: 31 @40662 has 106 MA's), (50, 40737), (59, 40779), (60, 40788), (68, 40821), (69, 40827), (83, 40908), (123, 41025), (140, 41112), (146, 41130), (155, 41166), (166, 41205),

Gene: ShedlockHolmes_58 Start: 40308, Stop: 40865, Start Num: 32

Candidate Starts for ShedlockHolmes_58:

(15, 40239), (Start: 32 @40308 has 75 MA's), (Start: 39 @40320 has 4 MA's), (Start: 41 @40326 has 3 MA's), (49, 40371), (57, 40410), (65, 40443), (69, 40467), (72, 40497), (121, 40656), (123, 40665), (146, 40770),

Gene: ShiaSurprise_58 Start: 40301, Stop: 40855, Start Num: 31

Candidate Starts for ShiaSurprise_58:

(6, 40154), (Start: 31 @40301 has 106 MA's), (Start: 39 @40313 has 4 MA's), (Start: 41 @40319 has 3 MA's), (49, 40367), (59, 40415), (60, 40424), (69, 40463), (72, 40493), (83, 40544), (112, 40631), (123, 40655), (140, 40742), (146, 40760), (148, 40766),

Gene: SirPhilip_58 Start: 40708, Stop: 41271, Start Num: 31

Candidate Starts for SirPhilip_58:

(Start: 31 @40708 has 106 MA's), (Start: 39 @40720 has 4 MA's), (59, 40822), (60, 40831), (69, 40870), (83, 40951), (113, 41041), (123, 41071), (133, 41128), (140, 41158), (163, 41239),

Gene: Slarp_62 Start: 40161, Stop: 40757, Start Num: 36

Candidate Starts for Slarp_62:

(Start: 36 @40161 has 28 MA's), (44, 40203), (60, 40281), (72, 40350), (74, 40362), (86, 40410), (123, 40530), (130, 40575), (140, 40617), (145, 40638), (146, 40641), (164, 40722),

Gene: Slimphazie_57 Start: 39980, Stop: 40534, Start Num: 31

Candidate Starts for Slimphazie_57:

(Start: 31 @39980 has 106 MA's), (Start: 39 @39992 has 4 MA's), (Start: 41 @39998 has 3 MA's), (49, 40046), (59, 40094), (60, 40103), (69, 40142), (72, 40172), (83, 40223), (112, 40310), (123, 40334), (140, 40421), (146, 40439), (148, 40445),

Gene: SoSeph_53 Start: 39361, Stop: 40140, Start Num: 7

Candidate Starts for SoSeph_53:

(Start: 7 @39361 has 12 MA's), (16, 39409), (17, 39415), (Start: 39 @39484 has 4 MA's), (51, 39550), (59, 39583), (65, 39607), (70, 39637), (72, 39661), (75, 39676), (86, 39721), (88, 39736), (93, 39772), (94, 39775), (95, 39784), (97, 39790), (101, 39802), (110, 39835), (123, 39874), (127, 39904), (142, 39973), (148, 39985), (166, 40057), (183, 40111), (184, 40126),

Gene: SparkleGoddess_81 Start: 60854, Stop: 61342, Start Num: 36

Candidate Starts for SparkleGoddess_81:

(Start: 36 @60854 has 28 MA's), (Start: 48 @60914 has 1 MA's), (74, 61034), (81, 61058), (85, 61073), (87, 61079), (89, 61094), (124, 61166), (128, 61190), (131, 61199), (138, 61223), (151, 61265), (164, 61328), (168, 61337),

Gene: Spock_57 Start: 40105, Stop: 40659, Start Num: 31

Candidate Starts for Spock_57:

(6, 39958), (Start: 31 @40105 has 106 MA's), (Start: 39 @40117 has 4 MA's), (Start: 41 @40123 has 3 MA's), (49, 40171), (59, 40219), (60, 40228), (69, 40267), (72, 40297), (83, 40348), (112, 40435), (123, 40459), (140, 40546), (146, 40564), (148, 40570),

Gene: Squint_151 Start: 81411, Stop: 81947, Start Num: 32

Candidate Starts for Squint_151:

(27, 81399), (29, 81405), (Start: 32 @81411 has 75 MA's), (Start: 39 @81423 has 4 MA's), (40, 81426), (42, 81432), (49, 81474), (65, 81546), (83, 81654), (86, 81663), (88, 81678), (117, 81729), (130, 81786), (140, 81828), (147, 81849),

Gene: Stellammi_167 Start: 72712, Stop: 73254, Start Num: 32

Candidate Starts for Stellammi_167:

(Start: 32 @72712 has 75 MA's), (44, 72754), (46, 72766), (52, 72799), (63, 72844), (65, 72850), (69, 72874), (74, 72916), (86, 72967), (124, 73075), (130, 73105), (138, 73132), (147, 73162), (170, 73243), (173, 73246),

Gene: Stigma_80 Start: 60862, Stop: 61350, Start Num: 36

Candidate Starts for Stigma_80:

(Start: 36 @60862 has 28 MA's), (Start: 48 @60922 has 1 MA's), (65, 60979), (67, 60988), (70, 61009), (74, 61042), (76, 61048), (87, 61087), (89, 61102), (101, 61138), (124, 61174), (128, 61198), (131, 61207), (138, 61231), (151, 61273), (164, 61336), (168, 61345),

Gene: Stinson_58 Start: 40482, Stop: 41036, Start Num: 31

Candidate Starts for Stinson_58:

(23, 40443), (Start: 31 @40482 has 106 MA's), (Start: 39 @40494 has 4 MA's), (Start: 41 @40500 has 3 MA's), (49, 40548), (60, 40605), (69, 40644), (72, 40674), (112, 40812), (123, 40836), (137, 40908), (140, 40923), (146, 40941), (163, 41004),

Gene: Strobilo_61 Start: 42006, Stop: 42539, Start Num: 32

Candidate Starts for Strobilo_61:

(21, 41955), (Start: 32 @42006 has 75 MA's), (40, 42021), (49, 42069), (59, 42117), (60, 42126), (68, 42159), (69, 42165), (70, 42171), (86, 42255), (105, 42321),

Gene: Sulley_57 Start: 40156, Stop: 40710, Start Num: 31

Candidate Starts for Sulley_57:

(Start: 31 @40156 has 106 MA's), (Start: 39 @40168 has 4 MA's), (Start: 41 @40174 has 3 MA's), (49, 40222), (59, 40270), (60, 40279), (69, 40318), (72, 40348), (83, 40399), (112, 40486), (123, 40510), (140, 40597), (146, 40615), (148, 40621),

Gene: Sunflower1121_63 Start: 40450, Stop: 41013, Start Num: 31

Candidate Starts for Sunflower1121_63:

(Start: 31 @40450 has 106 MA's), (Start: 39 @40462 has 4 MA's), (Start: 41 @40468 has 3 MA's), (47, 40510), (59, 40564), (65, 40588), (69, 40612), (83, 40693), (113, 40783), (123, 40813), (140, 40900), (146, 40918), (163, 40981),

Gene: Superphikiman_155 Start: 81247, Stop: 81834, Start Num: 32

Candidate Starts for Superphikiman_155:

(Start: 19 @81190 has 4 MA's), (Start: 32 @81247 has 75 MA's), (Start: 41 @81265 has 3 MA's), (42, 81268), (50, 81316), (55, 81343), (59, 81358), (62, 81373), (74, 81448), (82, 81484), (88, 81511), (140, 81715), (147, 81736),

Gene: Syra333_62 Start: 40471, Stop: 41025, Start Num: 32

Candidate Starts for Syra333_62:

(Start: 32 @40471 has 75 MA's), (Start: 39 @40483 has 4 MA's), (Start: 41 @40489 has 3 MA's), (59, 40585), (60, 40594), (65, 40609), (69, 40633), (83, 40714), (112, 40801), (123, 40825), (140, 40912), (154, 40957), (163, 40993),

Gene: TBond007_55 Start: 39788, Stop: 40345, Start Num: 32

Candidate Starts for TBond007_55:

(15, 39719), (Start: 32 @39788 has 75 MA's), (Start: 39 @39800 has 4 MA's), (Start: 41 @39806 has 3 MA's), (49, 39851), (57, 39890), (58, 39893), (65, 39923), (69, 39947), (72, 39977), (121, 40136), (123, 40145), (146, 40250), (160, 40301), (163, 40313),

Gene: TClif_59 Start: 40127, Stop: 40678, Start Num: 32

Candidate Starts for TClif_59:

(Start: 32 @40127 has 75 MA's), (Start: 39 @40139 has 4 MA's), (Start: 41 @40145 has 3 MA's), (49, 40190), (60, 40247), (65, 40262), (70, 40292), (74, 40328), (123, 40478), (140, 40565), (146, 40583), (148, 40589), (154, 40610),

Gene: TM4_57 Start: 36361, Stop: 36894, Start Num: 32

Candidate Starts for TM4_57:

(21, 36310), (Start: 32 @36361 has 75 MA's), (Start: 39 @36373 has 4 MA's), (49, 36424), (59, 36472), (60, 36481), (68, 36514), (69, 36520), (70, 36526), (86, 36610), (105, 36676),

Gene: Tachez_57 Start: 39949, Stop: 40503, Start Num: 31

Candidate Starts for Tachez_57:

(6, 39802), (Start: 31 @39949 has 106 MA's), (Start: 39 @39961 has 4 MA's), (Start: 41 @39967 has 3 MA's), (49, 40015), (59, 40063), (60, 40072), (69, 40111), (72, 40141), (83, 40192), (112, 40279), (123, 40303), (140, 40390), (146, 40408), (148, 40414),

Gene: TaiwanKao_59 Start: 40250, Stop: 40804, Start Num: 31

Candidate Starts for TaiwanKao_59:

(Start: 31 @40250 has 106 MA's), (Start: 39 @40262 has 4 MA's), (Start: 41 @40268 has 3 MA's), (49, 40316), (59, 40364), (60, 40373), (69, 40412), (72, 40442), (75, 40457), (83, 40493), (112, 40580), (123, 40604), (137, 40676), (140, 40691), (146, 40709), (148, 40715), (163, 40772),

Gene: Taquito_61 Start: 40396, Stop: 40992, Start Num: 36

Candidate Starts for Taquito_61:

(Start: 36 @40396 has 28 MA's), (44, 40438), (60, 40516), (72, 40585), (74, 40597), (86, 40645), (123, 40765), (130, 40810), (140, 40852), (145, 40873), (146, 40876), (164, 40957),

Gene: Teejan_51 Start: 40660, Stop: 41211, Start Num: 33

Candidate Starts for Teejan_51:

(3, 40426), (Start: 33 @40660 has 6 MA's), (Start: 41 @40681 has 3 MA's), (47, 40723), (50, 40735), (60, 40786), (69, 40825), (72, 40855), (83, 40906), (123, 41011), (140, 41098), (146, 41116), (148, 41122), (166, 41191),

Gene: Thibault_141 Start: 81109, Stop: 81639, Start Num: 32

Candidate Starts for Thibault_141:

(Start: 32 @81109 has 75 MA's), (Start: 41 @81127 has 3 MA's), (42, 81130), (Start: 48 @81169 has 1 MA's), (49, 81172), (72, 81298), (74, 81310), (86, 81361), (88, 81376), (117, 81427), (130, 81484), (164, 81610), (172, 81631),

Gene: ThreeRngTarjay_155 Start: 85312, Stop: 85848, Start Num: 32

Candidate Starts for ThreeRngTarjay_155:

(Start: 19 @85255 has 4 MA's), (Start: 32 @85312 has 75 MA's), (Start: 41 @85330 has 3 MA's), (72, 85501), (74, 85513), (86, 85564), (88, 85579), (140, 85729), (147, 85750),

Gene: ThursdayNight_28 Start: 22431, Stop: 22979, Start Num: 38

Candidate Starts for ThursdayNight_28:

(38, 22431), (71, 22593), (128, 22773), (175, 22944), (181, 22965),

Gene: Thyatira_55 Start: 41325, Stop: 42104, Start Num: 7

Candidate Starts for Thyatira_55:

(2, 41154), (Start: 7 @41325 has 12 MA's), (16, 41373), (17, 41379), (Start: 39 @41448 has 4 MA's), (51, 41514), (59, 41547), (65, 41571), (70, 41601), (72, 41625), (75, 41640), (86, 41685), (88, 41700), (93, 41736), (94, 41739), (95, 41748), (101, 41766), (110, 41799), (123, 41838), (127, 41868), (142, 41937), (148, 41949), (157, 41988), (166, 42021), (184, 42090),

Gene: Tierra_60 Start: 40268, Stop: 40831, Start Num: 31

Candidate Starts for Tierra_60:

(Start: 31 @40268 has 106 MA's), (Start: 39 @40280 has 4 MA's), (Start: 41 @40286 has 3 MA's), (59, 40382), (69, 40430), (83, 40511), (113, 40601), (123, 40631), (140, 40718), (146, 40736), (163, 40799),

Gene: Tigress9_65 Start: 40459, Stop: 41022, Start Num: 31

Candidate Starts for Tigress9_65:

(Start: 31 @40459 has 106 MA's), (Start: 39 @40471 has 4 MA's), (Start: 41 @40477 has 3 MA's), (47, 40519), (59, 40573), (65, 40597), (69, 40621), (83, 40702), (113, 40792), (123, 40822), (140, 40909), (146, 40927), (163, 40990),

Gene: TingHuaYa_58 Start: 39013, Stop: 39561, Start Num: 41

Candidate Starts for TingHuaYa_58:

(Start: 31 @38995 has 106 MA's), (Start: 39 @39007 has 4 MA's), (Start: 41 @39013 has 3 MA's), (47, 39055), (57, 39100), (59, 39109), (68, 39151), (69, 39157), (83, 39238), (123, 39361), (140, 39448), (146, 39466), (148, 39472), (163, 39529),

Gene: TiniBug_58 Start: 40881, Stop: 41435, Start Num: 31

Candidate Starts for TiniBug_58:

(Start: 31 @40881 has 106 MA's), (Start: 39 @40893 has 4 MA's), (Start: 41 @40899 has 3 MA's), (49, 40947), (59, 40995), (60, 41004), (69, 41043), (83, 41124), (112, 41211), (123, 41235), (140, 41322), (146, 41340), (148, 41346),

Gene: Tiri_58 Start: 40270, Stop: 40824, Start Num: 31

Candidate Starts for Tiri_58:

(Start: 31 @40270 has 106 MA's), (49, 40336), (59, 40384), (60, 40393), (69, 40432), (72, 40462), (83, 40513), (112, 40600), (123, 40624), (140, 40711), (146, 40729), (148, 40735),

Gene: Topper_57 Start: 40104, Stop: 40658, Start Num: 31

Candidate Starts for Topper_57:

(6, 39957), (Start: 31 @40104 has 106 MA's), (Start: 39 @40116 has 4 MA's), (Start: 41 @40122 has 3 MA's), (49, 40170), (59, 40218), (60, 40227), (69, 40266), (72, 40296), (83, 40347), (112, 40434), (123, 40458), (140, 40545), (146, 40563), (148, 40569),

Gene: Torres_52 Start: 40661, Stop: 41212, Start Num: 33

Candidate Starts for Torres_52:

(3, 40427), (Start: 33 @40661 has 6 MA's), (Start: 41 @40682 has 3 MA's), (47, 40724), (50, 40736), (60, 40787), (69, 40826), (72, 40856), (83, 40907), (123, 41012), (140, 41099), (146, 41117), (148, 41123), (166, 41192),

Gene: TreyKay_58 Start: 40200, Stop: 40742, Start Num: 39

Candidate Starts for TreyKay_58:

(Start: 31 @40188 has 106 MA's), (Start: 39 @40200 has 4 MA's), (Start: 41 @40206 has 3 MA's), (49, 40254), (59, 40302), (60, 40311), (69, 40350), (72, 40380), (75, 40395), (83, 40431), (112, 40518), (123, 40542), (137, 40614), (140, 40629), (146, 40647), (148, 40653), (163, 40710),

Gene: TribbleTrouble_56 Start: 40264, Stop: 40821, Start Num: 32

Candidate Starts for TribbleTrouble_56:

(Start: 32 @40264 has 75 MA's), (Start: 39 @40276 has 4 MA's), (Start: 41 @40282 has 3 MA's), (49, 40327), (57, 40366), (59, 40375), (65, 40399), (69, 40423), (123, 40621), (146, 40726),

Gene: Trice_49 Start: 38048, Stop: 38599, Start Num: 33

Candidate Starts for Trice_49:

(3, 37814), (Start: 33 @38048 has 6 MA's), (Start: 41 @38069 has 3 MA's), (47, 38111), (50, 38123), (60, 38174), (69, 38213), (72, 38243), (83, 38294), (123, 38399), (140, 38486), (146, 38504), (148, 38510), (166, 38579),

Gene: TruffulaTree_57 Start: 39976, Stop: 40530, Start Num: 31

Candidate Starts for TruffulaTree_57:

(Start: 31 @39976 has 106 MA's), (Start: 39 @39988 has 4 MA's), (Start: 41 @39994 has 3 MA's), (49, 40042), (59, 40090), (60, 40099), (69, 40138), (72, 40168), (83, 40219), (112, 40306), (123, 40330), (140, 40417), (146, 40435), (148, 40441),

Gene: TunaTartare_80 Start: 61330, Stop: 61827, Start Num: 32

Candidate Starts for TunaTartare_80:

(Start: 32 @61330 has 75 MA's), (44, 61375), (89, 61576), (128, 61672), (131, 61681), (135, 61696), (138, 61705), (141, 61723), (158, 61789), (164, 61810),

Gene: Twitch_57 Start: 40106, Stop: 40660, Start Num: 31

Candidate Starts for Twitch_57:

(6, 39959), (Start: 31 @40106 has 106 MA's), (Start: 39 @40118 has 4 MA's), (Start: 41 @40124 has 3 MA's), (49, 40172), (59, 40220), (60, 40229), (69, 40268), (72, 40298), (83, 40349), (112, 40436), (123, 40460), (140, 40547), (146, 40565), (148, 40571),

Gene: Typha_56 Start: 42274, Stop: 42870, Start Num: 32

Candidate Starts for Typha_56:

(1, 41821), (4, 42085), (Start: 32 @42274 has 75 MA's), (Start: 41 @42292 has 3 MA's), (42, 42295), (43, 42301), (65, 42412), (72, 42466), (75, 42481), (83, 42517), (86, 42526), (87, 42529), (93, 42577), (98, 42580), (107, 42610), (126, 42676), (130, 42697), (170, 42844), (177, 42859),

Gene: Unicorn_58 Start: 39396, Stop: 39959, Start Num: 31

Candidate Starts for Unicorn_58:

(15, 39327), (Start: 31 @39396 has 106 MA's), (Start: 39 @39408 has 4 MA's), (Start: 41 @39414 has 3 MA's), (59, 39510), (65, 39534), (69, 39558), (83, 39639), (113, 39729), (123, 39759), (140, 39846), (146, 39864), (163, 39927),

Gene: Urkel_58 Start: 40885, Stop: 41439, Start Num: 31

Candidate Starts for Urkel_58:

(Start: 31 @40885 has 106 MA's), (Start: 39 @40897 has 4 MA's), (Start: 41 @40903 has 3 MA's), (49, 40951), (59, 40999), (60, 41008), (69, 41047), (83, 41128), (112, 41215), (123, 41239), (140, 41326), (146, 41344), (148, 41350),

Gene: Validus_61 Start: 40705, Stop: 41262, Start Num: 31

Candidate Starts for Validus_61:

(25, 40678), (Start: 31 @40705 has 106 MA's), (50, 40780), (59, 40822), (69, 40870), (70, 40876), (79, 40936), (83, 40951), (123, 41062), (140, 41149), (146, 41167), (148, 41173), (166, 41242),

Gene: Veliki_58 Start: 39962, Stop: 40516, Start Num: 31

Candidate Starts for Veliki_58:

(Start: 31 @39962 has 106 MA's), (Start: 39 @39974 has 4 MA's), (Start: 41 @39980 has 3 MA's), (49, 40028), (59, 40076), (60, 40085), (69, 40124), (72, 40154), (75, 40169), (83, 40205), (112, 40292), (123, 40316), (126, 40340), (137, 40388), (140, 40403), (146, 40421), (148, 40427), (163, 40484),

Gene: Wakanda_73 Start: 59478, Stop: 59969, Start Num: 36

Candidate Starts for Wakanda_73:

(Start: 36 @59478 has 28 MA's), (42, 59499), (Start: 48 @59541 has 1 MA's), (65, 59598), (67, 59607), (87, 59706), (89, 59721), (128, 59817), (135, 59841), (138, 59850), (141, 59868), (145, 59880), (168, 59964),

Gene: Wanda_158 Start: 82485, Stop: 83021, Start Num: 32

Candidate Starts for Wanda_158:

(Start: 32 @82485 has 75 MA's), (Start: 41 @82503 has 3 MA's), (42, 82506), (72, 82674), (74, 82686), (86, 82737), (88, 82752), (140, 82902), (166, 82995),

Gene: Waterfoul_54 Start: 39423, Stop: 40202, Start Num: 7

Candidate Starts for Waterfoul_54:

(Start: 7 @39423 has 12 MA's), (16, 39471), (17, 39477), (Start: 39 @39546 has 4 MA's), (51, 39612), (59, 39645), (65, 39669), (70, 39699), (72, 39723), (75, 39738), (86, 39783), (88, 39798), (93, 39834), (94, 39837), (95, 39846), (97, 39852), (101, 39864), (110, 39897), (123, 39936), (127, 39966), (142, 40035), (148, 40047), (166, 40119), (183, 40173), (184, 40188),

Gene: Westy_82 Start: 60854, Stop: 61342, Start Num: 36

Candidate Starts for Westy_82:

(Start: 36 @60854 has 28 MA's), (Start: 48 @60914 has 1 MA's), (74, 61034), (81, 61058), (85, 61073), (87, 61079), (89, 61094), (124, 61166), (128, 61190), (131, 61199), (138, 61223), (151, 61265), (164, 61328), (168, 61337),

Gene: Wildcat_136 Start: 64934, Stop: 65449, Start Num: 37

Candidate Starts for Wildcat_136:

(Start: 37 @64934 has 20 MA's), (Start: 41 @64949 has 3 MA's), (44, 64973), (45, 64979), (50, 65000), (53, 65018), (56, 65030), (57, 65033), (69, 65090), (74, 65132), (86, 65180), (87, 65183), (93, 65231), (98, 65234), (122, 65252), (131, 65303), (140, 65342), (142, 65354), (155, 65399),

Gene: Wintermute_62 Start: 40391, Stop: 40987, Start Num: 36

Candidate Starts for Wintermute_62:

(Start: 36 @40391 has 28 MA's), (44, 40433), (60, 40511), (72, 40580), (74, 40592), (86, 40640), (123, 40760), (130, 40805), (140, 40847), (145, 40868), (146, 40871), (164, 40952),

Gene: Xiaokay_153 Start: 84754, Stop: 85284, Start Num: 32

Candidate Starts for Xiaokay_153:

(27, 84742), (29, 84748), (Start: 32 @84754 has 75 MA's), (Start: 39 @84766 has 4 MA's), (40, 84769), (42, 84775), (49, 84817), (65, 84889), (83, 84997), (86, 85006), (88, 85021), (117, 85072), (130, 85129), (164, 85255), (172, 85276),

Gene: Ximenita_63 Start: 40468, Stop: 41031, Start Num: 31

Candidate Starts for Ximenita_63:

(Start: 31 @40468 has 106 MA's), (Start: 39 @40480 has 4 MA's), (Start: 41 @40486 has 3 MA's), (47, 40528), (65, 40606), (69, 40630), (83, 40711), (113, 40801), (123, 40831), (140, 40918), (146, 40936), (163, 40999),

Gene: Y10_60 Start: 40319, Stop: 40915, Start Num: 36

Candidate Starts for Y10_60:

(Start: 36 @40319 has 28 MA's), (44, 40361), (60, 40439), (72, 40508), (74, 40520), (86, 40568), (109, 40658), (111, 40661), (123, 40688), (130, 40733), (140, 40775), (145, 40796), (146, 40799), (164, 40880),

Gene: Y2_60 Start: 40319, Stop: 40915, Start Num: 36

Candidate Starts for Y2_60:

(Start: 36 @40319 has 28 MA's), (44, 40361), (60, 40439), (72, 40508), (74, 40520), (86, 40568), (109, 40658), (111, 40661), (123, 40688), (130, 40733), (140, 40775), (145, 40796), (146, 40799), (164, 40880),

Gene: YasnayaPolyana_61 Start: 40244, Stop: 40840, Start Num: 36

Candidate Starts for YasnayaPolyana_61:

(Start: 36 @40244 has 28 MA's), (44, 40286), (60, 40364), (72, 40433), (74, 40445), (86, 40493), (123, 40613), (130, 40658), (140, 40700), (145, 40721), (146, 40724), (164, 40805),

Gene: Yeet_152 Start: 83848, Stop: 84384, Start Num: 32

Candidate Starts for Yeet_152:

(Start: 14 @83773 has 4 MA's), (Start: 19 @83791 has 4 MA's), (Start: 32 @83848 has 75 MA's), (Start: 41 @83866 has 3 MA's), (72, 84037), (74, 84049), (86, 84100), (88, 84115), (140, 84265), (147, 84286), (166, 84358),

Gene: YoureAdopted_56 Start: 40105, Stop: 40659, Start Num: 32

Candidate Starts for YoureAdopted_56:

(Start: 32 @40105 has 75 MA's), (Start: 39 @40117 has 4 MA's), (49, 40171), (59, 40219), (60, 40228), (69, 40267), (72, 40297), (83, 40348), (112, 40435), (123, 40459), (140, 40546), (146, 40564), (148, 40570),

Gene: Yuna_62 Start: 41255, Stop: 41863, Start Num: 32

Candidate Starts for Yuna_62:

(Start: 32 @41255 has 75 MA's), (Start: 39 @41267 has 4 MA's), (69, 41417), (70, 41423), (72, 41447), (83, 41498), (88, 41522), (112, 41585), (123, 41609), (140, 41696), (154, 41741),

Gene: Yunkel11_59 Start: 39487, Stop: 40053, Start Num: 31

Candidate Starts for Yunkel11_59:

(Start: 31 @39487 has 106 MA's), (Start: 39 @39499 has 4 MA's), (Start: 41 @39505 has 3 MA's), (68, 39643), (69, 39649), (83, 39730), (123, 39853), (140, 39940), (146, 39958), (148, 39964), (163,

40021),

Gene: Zabiza_52 Start: 36290, Stop: 36844, Start Num: 31

Candidate Starts for Zabiza_52:

(Start: 31 @36290 has 106 MA's), (Start: 39 @36302 has 4 MA's), (Start: 41 @36308 has 3 MA's), (49, 36356), (59, 36404), (60, 36413), (69, 36452), (72, 36482), (75, 36497), (83, 36533), (112, 36620), (123, 36644), (126, 36668), (137, 36716), (140, 36731), (146, 36749),

Gene: Zavala_59 Start: 40261, Stop: 40815, Start Num: 31

Candidate Starts for Zavala_59:

(Start: 31 @40261 has 106 MA's), (Start: 39 @40273 has 4 MA's), (Start: 41 @40279 has 3 MA's), (49, 40327), (59, 40375), (60, 40384), (69, 40423), (72, 40453), (75, 40468), (83, 40504), (112, 40591), (123, 40615), (126, 40639), (137, 40687), (140, 40702), (146, 40720), (148, 40726), (163, 40783),

Gene: Zelink_153 Start: 84208, Stop: 84744, Start Num: 32

Candidate Starts for Zelink_153:

(Start: 32 @84208 has 75 MA's), (Start: 41 @84226 has 3 MA's), (42, 84229), (72, 84397), (74, 84409), (86, 84460), (88, 84475), (140, 84625), (166, 84718),

Gene: ZoeJ_59 Start: 41402, Stop: 41935, Start Num: 32

Candidate Starts for ZoeJ_59:

(21, 41351), (Start: 32 @41402 has 75 MA's), (40, 41417), (49, 41465), (59, 41513), (60, 41522), (68, 41555), (69, 41561), (70, 41567), (86, 41651), (105, 41717),