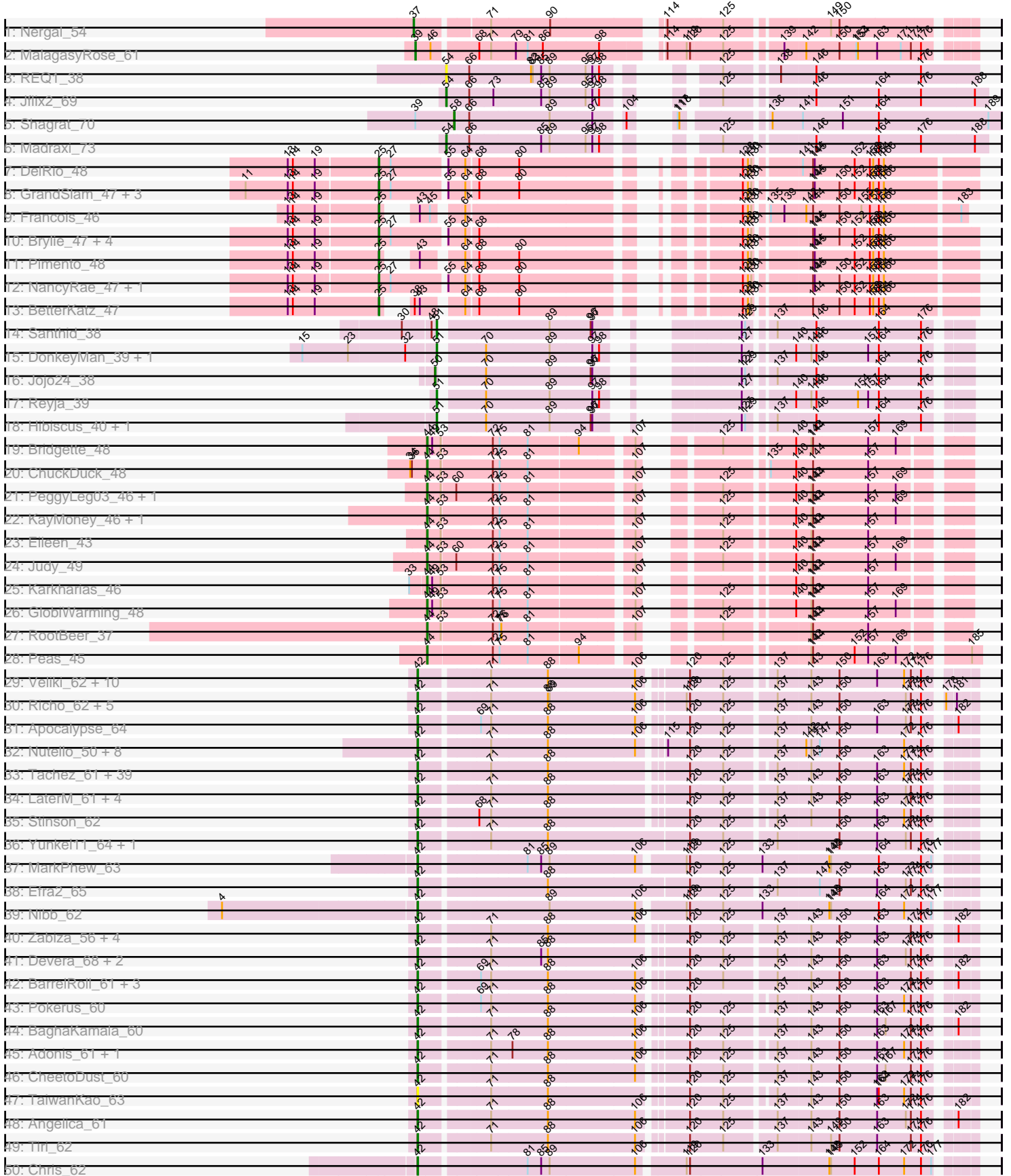
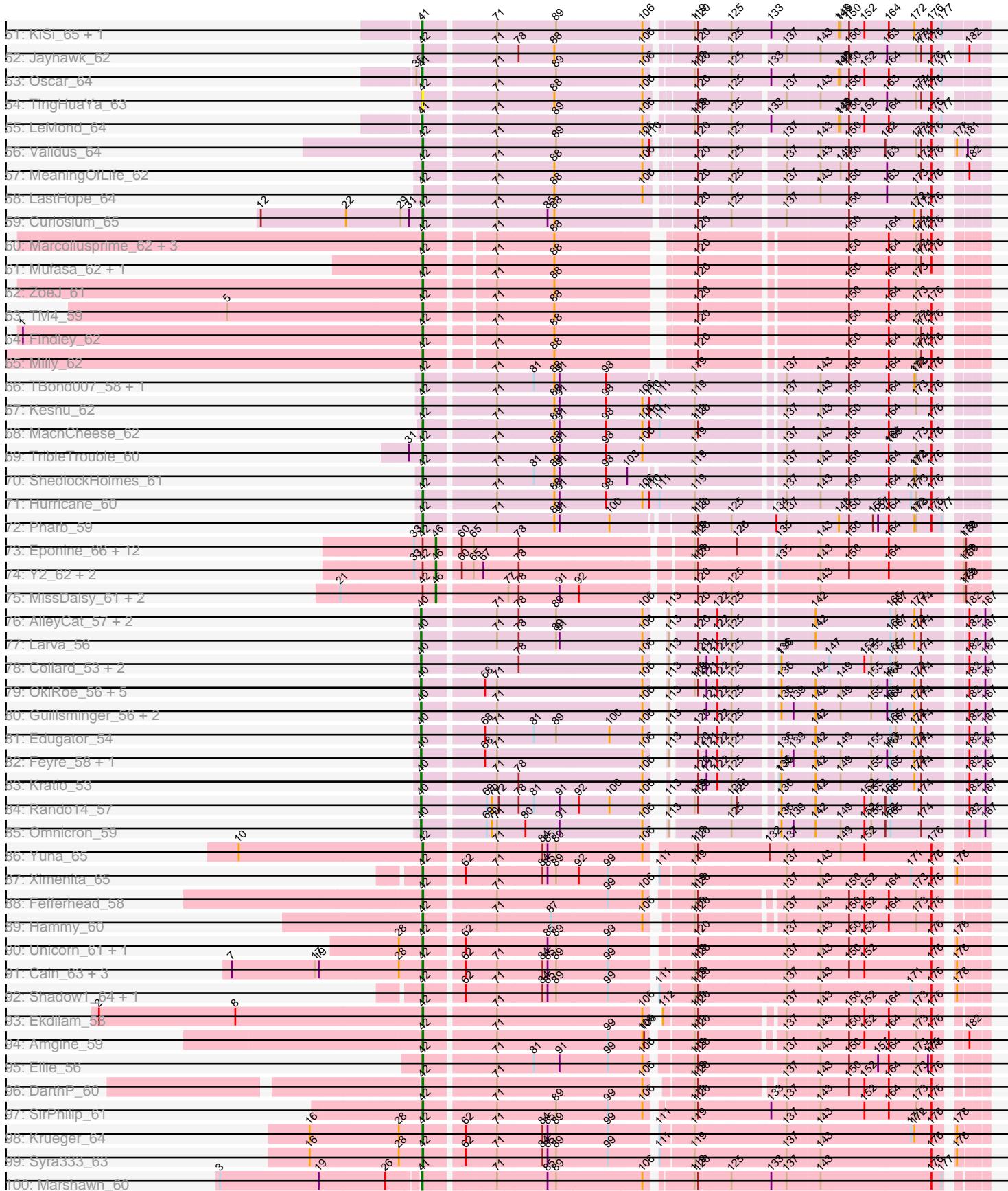
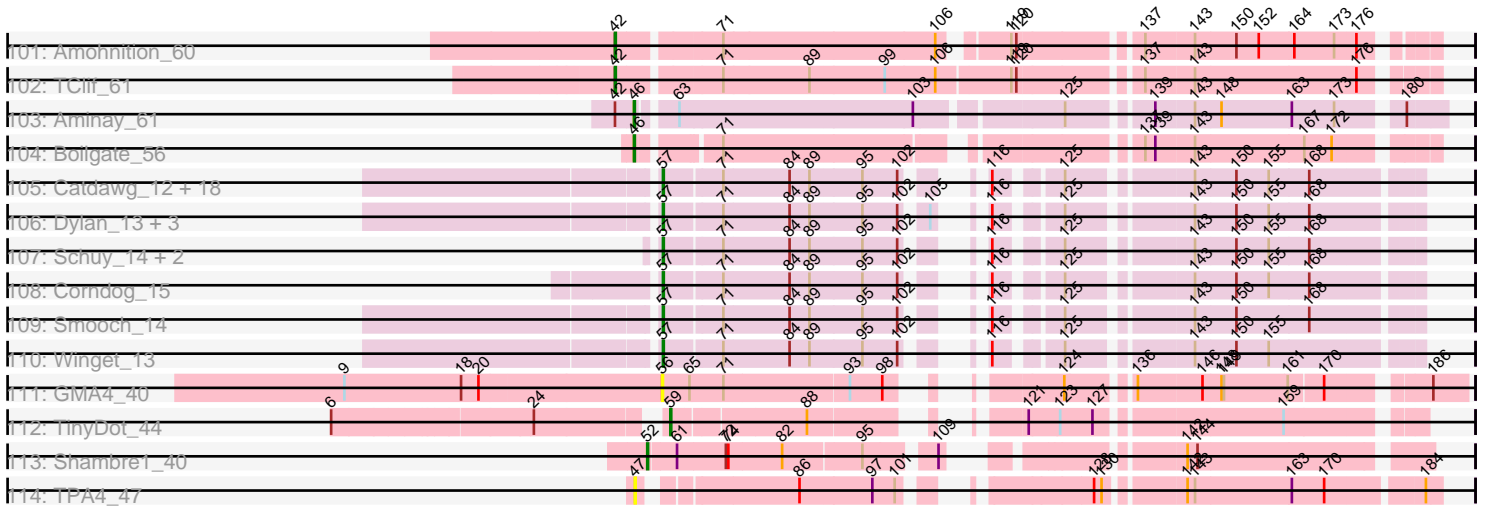


Pham 192286





Pham 192286



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 192286 Report

This analysis was run 11/02/24 on database version 579.

Pham number 192286 has 265 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Nergal_54
- Track 2 : MalagasyRose_61
- Track 3 : REQ1_38
- Track 4 : Jflix2_69
- Track 5 : Shagrat_70
- Track 6 : Madraxi_73
- Track 7 : DelRio_48
- Track 8 : GrandSlam_47, Hamood_47, Chop_47, Ayotoya_47
- Track 9 : Francois_46
- Track 10 : Brylie_47, Mulch_47, WheatThin_47, Nadeem_47, Parada_47
- Track 11 : Pimento_48
- Track 12 : NancyRae_47, Bock_47
- Track 13 : BetterKatz_47
- Track 14 : Santhid_38
- Track 15 : DonkeyMan_39, Tarzan_39
- Track 16 : Jojo24_38
- Track 17 : Reyja_39
- Track 18 : Hibiscus_40, Heinz_40
- Track 19 : Bridgette_48
- Track 20 : ChuckDuck_48
- Track 21 : PeggyLeg03_46, Pucara_43
- Track 22 : KayMoney_46, Constance_46
- Track 23 : Eileen_43
- Track 24 : Judy_49
- Track 25 : Karkharias_46
- Track 26 : GlobiWarming_48
- Track 27 : RootBeer_37
- Track 28 : Peas_45
- Track 29 : Veliki_62, Emerson_62, QuincyRose_60, YoureAdopted_60, Beezoo_63, Ganymede_62, JAWS_61, Mynx_62, Anaya_63, Padpat_63, Geraldini_64
- Track 30 : Richo_62, Dartin_62, Niklas_62, Shaobing_62, McMater_62, Peanam_62
- Track 31 : Apocalypse_64
- Track 32 : Nutello_50, Nikao_53, Torres_52, Binglebops_50, LilPharaoh_50, Enkosi_52, Amelie_50, Mdavu_51, SgtBeansprout_50
- Track 33 : Tachez_61, BGlluviae_61, Jarvi_61, Peel_61, TiniBug_62, Blizzard_61, DrHayes_62, Joy99_61, Atiba_62, Hyperbowlee_61, Adephegia_61, LindNT_60, Urkel_62, Llorens_61, Homura_61, CaseJules_63, Spock_61, Capricorn_61,

Rosmarinus_61, ShiaSurprise_62, Lunahalos_61, Boiiii_61, Bella96_62, SamuelLPlaqsom_62, CrimD_62, Durfee_61, Belladonna_61, Padfoot_61, Topper_61, Piatt_61, Dalmuri_61, Inky_61, Asayake_61, TreyKay_62, Jeckyll_61, Twitch_61, AlishaPH_61, BEEST_61, CREW_61, Prithvi_62

- Track 34 : LaterM_61, Ageofdapage_64, Megsy_63, Sulley_61, Murucutumbu_62
- Track 35 : Stinson_62
- Track 36 : Yunkel11_64, Guanica15_64
- Track 37 : MarkPhew_63
- Track 38 : Efra2_65
- Track 39 : Nibb_62
- Track 40 : Zabiza_56, Deby_61, Ramen_62, ActinUp_61, HedwigODU_61
- Track 41 : Devera_68, Dole_66, Illumine_66
- Track 42 : BarrelRoll_61, Rapunzel97_62, TruffulaTree_61, Slimphazie_61
- Track 43 : Pokerus_60
- Track 44 : BaghaKamala_60
- Track 45 : Adonis_61, Zavala_63
- Track 46 : CheetoDust_60
- Track 47 : TaiwanKao_63
- Track 48 : Angelica_61
- Track 49 : Tiri_62
- Track 50 : Chris_62
- Track 51 : KiSi_65, Scarlett_65
- Track 52 : Jayhawk_62
- Track 53 : Oscar_64
- Track 54 : TingHuaYa_63
- Track 55 : LeMond_64
- Track 56 : Validus_64
- Track 57 : MeaningOfLife_62
- Track 58 : LastHope_64
- Track 59 : Curiosium_65
- Track 60 : Marcoliusprime_62, DismalFunk_62, DismalStressor_62, Strobilo_63
- Track 61 : Mufasa_62, BoostSeason_62
- Track 62 : ZoeJ_61
- Track 63 : TM4_59
- Track 64 : Findley_62
- Track 65 : Milly_62
- Track 66 : TBond007_58, Pixie_59
- Track 67 : Keshu_62
- Track 68 : MacnCheese_62
- Track 69 : TribbleTrouble_60
- Track 70 : ShedlockHolmes_61
- Track 71 : Hurricane_60
- Track 72 : Pharb_59
- Track 73 : Eponine_66, Juliette_66, Cheetobro_64, Ruthiejr_65, Taquito_63, Malthus_65, Mitti_64, Fionnbharth_64, Slarp_64, Wintermute_64, SamScheppers_62, Chancellor_64, OmniCritical_63
- Track 74 : Y2_62, Y10_62, JF1_64
- Track 75 : MissDaisy_61, Patt_60, Reptar3000_61
- Track 76 : AlleyCat_57, Psycho_55, Dadosky_57
- Track 77 : Larva_56
- Track 78 : Collard_53, Agent47_55, InvictusManeo_53
- Track 79 : OkiRoe_56, SoSeph_56, Heftyboy_56, Gengar_55, Miryou_59, Waterfoul_57

- Track 80 : Guillsminger_56, Paola_55, Leston_55
- Track 81 : Edugator_54
- Track 82 : Feyre_58, Thyatira_58
- Track 83 : Kratio_53
- Track 84 : Rando14_57
- Track 85 : Omnicron_59
- Track 86 : Yuna_65
- Track 87 : Ximenita_65
- Track 88 : Fefferhead_58
- Track 89 : Hammy_60
- Track 90 : Unicorn_61, PhelpsODU_61
- Track 91 : Cain_63, Bryler_63, Phrank_63, Tierra_63
- Track 92 : Shadow1_64, Sunflower1121_65
- Track 93 : Ekdilam_58
- Track 94 : Amgine_59
- Track 95 : Ellie_56
- Track 96 : DarthP_60
- Track 97 : SirPhilip_61
- Track 98 : Krueger_64
- Track 99 : Syra333_63
- Track 100 : Marshawn_60
- Track 101 : Amohnition_60
- Track 102 : TClif_61
- Track 103 : Aminay_61
- Track 104 : Boilgate_56
- Track 105 : Catdawg_12, YungJamal_14, SchoolBus_12, JangDynasty_12, Alkhayr_13, FoulBall_12, Idergollasper_12, Blessica_12, Vorrps_13, Mori_13, Murai_13, Bora_13, Familton_13, Vagabond_13, Shida_13, Ryadel_15, Firecracker_13, NiebruSaylor_13, TelAviv_12
- Track 106 : Dylan_13, Zakhe101_14, Ashwin_14, Wildflower_13
- Track 107 : Schuy_14, Krili_13, MadKillah_14
- Track 108 : Corndog_15
- Track 109 : Smooch_14
- Track 110 : Winget_13
- Track 111 : GMA4_40
- Track 112 : TinyDot_44
- Track 113 : Shambre1_40
- Track 114 : TPA4_47

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

The start number called the most often in the published annotations is 42, it was called in 138 of the 250 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_61, Adephegia_61, Adonis_61, Ageofdapage_64, AlishaPH_61, Amelie_50, Amgine_59, Amohnition_60, Anaya_63, Angelica_61, Apocalypse_64, Asayake_61, Atiba_62, BEEST_61, BGlluviae_61, BaghaKamala_60, BarrelRoll_61, Beezoo_63, Bella96_62, Belladonna_61, Biglebops_50, Blizzard_61, Boiiii_61, BoostSeason_62, Bryler_63, CREW_61, Cain_63, Capricorn_61, CaseJules_63,

CheetoDust_60, Chris_62, CrimD_62, Curiosium_65, Dalmuri_61, DarthP_60, Dartin_62, Deby_61, Devera_68, DismalFunk_62, DismalStressor_62, Dole_66, DrHayes_62, Durfee_61, Efra2_65, Ekdilam_58, Ellie_56, Emerson_62, Enkosi_52, Fefferhead_58, Findley_62, Ganymede_62, Geraldini_64, Guanica15_64, Hammy_60, HedwigODU_61, Homura_61, Hurricane_60, Hyperbowlee_61, Illumine_66, Inky_61, JAWS_61, Jarvi_61, Jayhawk_62, Jeckyll_61, Joy99_61, Keshu_62, Krueger_64, LastHope_64, LaterM_61, LilPharaoh_50, LindNT_60, Llorens_61, Lunahalos_61, MacnCheese_62, Marcoliusprime_62, MarkPheW_63, McMater_62, Mdavu_51, MeaningOfLife_62, Megsy_63, Milly_62, Mufasa_62, Murucutumbu_62, Mynx_62, Nibb_62, Nikao_53, Niklas_62, Nutello_50, Padfoot_61, Padpat_63, Peanam_62, Peel_61, Pharb_59, PhelpsODU_61, Phrank_63, Piatt_61, Pixie_59, Pokerus_60, Prithvi_62, QuincyRose_60, Ramen_62, Rapunzel97_62, Richo_62, Rosmarinus_61, SamuelLPlaQson_62, SgtBeansprout_50, Shadow1_64, Shaobing_62, ShedlockHolmes_61, ShiaSurprise_62, SirPhilip_61, Slimphazie_61, Spock_61, Stinson_62, Strobilo_63, Sulley_61, Sunflower1121_65, Syra333_63, TBond007_58, TClif_61, TM4_59, Tachez_61, TaiwanKao_63, Tierra_63, TingHuaYa_63, TiniBug_62, Tiri_62, Topper_61, Torres_52, TreyKay_62, TribbleTrouble_60, TruffulaTree_61, Twitch_61, Unicorn_61, Urkel_62, Validus_64, Veliki_62, Ximenita_65, YoureAdopted_60, Yuna_65, Yunkel11_64, Zabiza_56, Zavala_63, ZoeJ_61,

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

- Aminay_61, Chancellor_64, Cheetobro_64, Eponine_66, Fionnbharth_64, JF1_64, Juliette_66, Malthus_65, MissDaisy_61, Mitti_64, OmniCritical_63, Patt_60, Reptar3000_61, Ruthiejr_65, SamScheppers_62, Slarp_64, Taquito_63, Wintermute_64, Y10_62, Y2_62,

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

- Agent47_55, Alkhayr_13, AlleyCat_57, Ashwin_14, Ayotoya_47, BetterKatz_47, Blessica_12, Bock_47, Boilgate_56, Bora_13, Bridgette_48, Brylie_47, Catdawg_12, Chop_47, ChuckDuck_48, Collard_53, Constance_46, Corndog_15, Dadosky_57, DelRio_48, DonkeyMan_39, Dylan_13, Edugator_54, Eileen_43, Familton_13, Feyre_58, Firecracker_13, FoulBall_12, Francois_46, GMA4_40, Gengar_55, GlobiWarming_48, GrandSlam_47, Guillsminger_56, Hamood_47, Heftyboy_56, Heinz_40, Hibiscus_40, Idergollasper_12, InvictusManeo_53, JangDynasty_12, Jflix2_69, Jojo24_38, Judy_49, Karkharias_46, KayMoney_46, KiSi_65, Kratio_53, KriLi_13, Larva_56, LeMond_64, Leston_55, MadKillah_14, Madraxi_73, MalagasyRose_61, Marshawn_60, Miryou_59, Mori_13, Mulch_47, Murai_13, Nadeem_47, NancyRae_47, Nergal_54, NiebruSaylor_13, OkiRoe_56, Omnicron_59, Oscar_64, Paola_55, Parada_47, Peas_45, PeggyLeg03_46, Pimento_48, Psycho_55, Pucara_43, REQ1_38, Rando14_57, Reyja_39, RootBeer_37, Ryadel_15, Santhid_38, Scarlett_65, SchoolBus_12, Schuy_14, Shagrat_70, Shambre1_40, Shida_13, Smooch_14, SoSeph_56, TPA4_47, Tarzan_39, TelAviv_12, Thyatira_58, TinyDot_44, Vagabond_13, Vorrrps_13, Waterfoul_57, WheatThin_47, Wildflower_13, Winget_13, YungJamal_14, Zakhe101_14,

Summary by start number:

Start 25:

- Found in 15 of 265 (5.7%) of genes in pham
- Manual Annotations of this start: 15 of 250
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Ayotoya_47 (DI), BetterKatz_47 (DI), Bock_47 (DI), Brylie_47 (DI), Chop_47 (DI), DelRio_48 (DI), Francois_46 (DI), GrandSlam_47 (DI), Hamood_47 (DI), Mulch_47 (DI), Nadeem_47 (DI), NancyRae_47 (DI), Parada_47 (DI), Pimento_48 (DI), WheatThin_47 (DI),

Start 37:

- Found in 1 of 265 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 250
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nergal_54 (AG),

Start 39:

- Found in 2 of 265 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 250
- Called 50.0% of time when present
- Phage (with cluster) where this start called: MalagasyRose_61 (AG),

Start 40:

- Found in 22 of 265 (8.3%) of genes in pham
- Manual Annotations of this start: 22 of 250
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agent47_55 (K5), AlleyCat_57 (K5), Collard_53 (K5), Dadosky_57 (K5), Edugator_54 (K5), Feyre_58 (K5), Gengar_55 (K5), Guillsminger_56 (K5), Heftyboy_56 (K5), InvictusManeo_53 (K5), Kratio_53 (K5), Larva_56 (K5), Leston_55 (K5), Miryou_59 (K5), OkiRoe_56 (K5), Omnicron_59 (K5), Paola_55 (K5), Psycho_55 (K5), Rando14_57 (K5), SoSeph_56 (K5), Thyatira_58 (K5), Waterfoul_57 (K5),

Start 41:

- Found in 5 of 265 (1.9%) of genes in pham
- Manual Annotations of this start: 5 of 250
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KiSi_65 (K1), LeMond_64 (K1), Marshawn_60 (K6), Oscar_64 (K1), Scarlett_65 (K1),

Start 42:

- Found in 164 of 265 (61.9%) of genes in pham
- Manual Annotations of this start: 138 of 250
- Called 87.8% of time when present
- Phage (with cluster) where this start called: ActinUp_61 (K1), Adephegia_61 (K1), Adonis_61 (K1), Ageofdapage_64 (K1), AlishaPH_61 (K1), Amelie_50 (K1), Amgine_59 (K6), Amohnition_60 (K6), Anaya_63 (K1), Angelica_61 (K1), Apocalypse_64 (K1), Asayake_61 (K1), Atiba_62 (K1), BEEST_61 (K1), BGIlluviae_61 (K1), BaghaKamala_60 (K1), BarrelRoll_61 (K1), Beezoo_63 (K1), Bella96_62 (K1), Belladonna_61 (K1), Binglebops_50 (K1), Blizzard_61 (K1), Boiiii_61 (K1), BoostSeason_62 (K2), Bryler_63 (K6), CREW_61 (K1), Cain_63 (K6), Capricorn_61 (K1), CaseJules_63 (K1), CheetoDust_60 (K1), Chris_62 (K1), CrimD_62 (K1), Curiosium_65 (K1), Dalmuri_61 (K1), DarthP_60 (K6), Dartin_62 (K1), Deby_61 (K1), Devera_68 (K1), DismalFunk_62 (K2), DismalStressor_62 (K2), Dole_66 (K1), DrHayes_62 (K1), Durfee_61 (K1), Efra2_65 (K1), Ekdilam_58 (K6), Ellie_56 (K6), Emerson_62 (K1), Enkosi_52 (K1), Fefferhead_58 (K6), Findley_62 (K2), Ganymede_62 (K1), Geraldini_64 (K1), Guanica15_64 (K1), Hammy_60 (K6), HedwigODU_61 (K1), Homura_61 (K1), Hurricane_60 (K3), Hyperbowlee_61 (K1),

Illumine_66 (K1), Inky_61 (K1), JAWS_61 (K1), Jarvi_61 (K1), Jayhawk_62 (K1), Jeckyll_61 (K1), Joy99_61 (K1), Keshu_62 (K3), Krueger_64 (K6), LastHope_64 (K1), LaterM_61 (K1), LilPharaoh_50 (K1), LindNT_60 (K1), Llorens_61 (K1), Lunahalos_61 (K1), MacnCheese_62 (K3), Marcoliusprime_62 (K2), MarkPheW_63 (K1), McMater_62 (K1), Mdavu_51 (K1), MeaningOfLife_62 (K1), Megsy_63 (K1), Milly_62 (K2), Mufasa_62 (K2), Murucutumbu_62 (K1), Mynx_62 (K1), Nibb_62 (K1), Nikao_53 (K1), Niklas_62 (K1), Nutello_50 (K1), Padfoot_61 (K1), Padpat_63 (K1), Peanam_62 (K1), Peel_61 (K1), Pharb_59 (K3), PhelpsODU_61 (K6), Phrank_63 (K6), Piatt_61 (K1), Pixie_59 (K3), Pokerus_60 (K1), Prithvi_62 (K1), QuincyRose_60 (K1), Ramen_62 (K1), Rapunzel97_62 (K1), Richo_62 (K1), Rosmarinus_61 (K1), SamuelLPlaqson_62 (K1), SgtBeansprout_50 (K1), Shadow1_64 (K6), Shaobing_62 (K1), ShedlockHolmes_61 (K3), ShiaSurprise_62 (K1), SirPhilip_61 (K6), Slimphazie_61 (K1), Spock_61 (K1), Stinson_62 (K1), Strobilo_63 (K2), Sulley_61 (K1), Sunflower1121_65 (K6), Syra333_63 (K6), TBond007_58 (K3), TClif_61 (K6), TM4_59 (K2), Tachez_61 (K1), TaiwanKao_63 (K1), Tierra_63 (K6), TingHuaYa_63 (K1), TiniBug_62 (K1), Tiri_62 (K1), Topper_61 (K1), Torres_52 (K1), TreyKay_62 (K1), TribbleTrouble_60 (K3), TruffulaTree_61 (K1), Twitch_61 (K1), Unicorn_61 (K6), Urkel_62 (K1), Validus_64 (K1), Veliki_62 (K1), Ximenita_65 (K6), YoureAdopted_60 (K1), Yuna_65 (K6), Yunkel11_64 (K1), Zabiza_56 (K1), Zavala_63 (K1), ZoeJ_61 (K2),

Start 44:

- Found in 12 of 265 (4.5%) of genes in pham
- Manual Annotations of this start: 10 of 250
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bridgette_48 (FA), ChuckDuck_48 (FA), Constance_46 (FA), Eileen_43 (FA), GlobiWarming_48 (FA), Judy_49 (FA), Karkharias_46 (FA), KayMoney_46 (FA), Peas_45 (FA), PeggyLeg03_46 (FA), Pucara_43 (FA), RootBeer_37 (FA),

Start 46:

- Found in 22 of 265 (8.3%) of genes in pham
- Manual Annotations of this start: 21 of 250
- Called 95.5% of time when present
- Phage (with cluster) where this start called: Aminay_61 (K7), Boilgate_56 (K8), Chancellor_64 (K4), Cheetobro_64 (K4), Eponine_66 (K4), Fionnbharth_64 (K4), JF1_64 (K4), Juliette_66 (K4), Malthus_65 (K4), MissDaisy_61 (K4), Mitti_64 (K4), OmniCritical_63 (K4), Patt_60 (K4), Reptar3000_61 (K4), Ruthiejr_65 (K4), SamScheppers_62 (K4), Slarp_64 (K4), Taquito_63 (K4), Wintermute_64 (K4), Y10_62 (K4), Y2_62 (K4),

Start 47:

- Found in 1 of 265 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TPA4_47 (singleton),

Start 50:

- Found in 1 of 265 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 250
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jojo24_38 (DY),

Start 51:

- Found in 6 of 265 (2.3%) of genes in pham
- Manual Annotations of this start: 4 of 250
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DonkeyMan_39 (DY), Heinz_40 (DY), Hibiscus_40 (DY), Reyja_39 (DY), Santhid_38 (DY), Tarzan_39 (DY),

Start 52:

- Found in 1 of 265 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 250
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shambre1_40 (singleton),

Start 54:

- Found in 3 of 265 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 250
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jflix2_69 (CF), Madraxi_73 (CF), REQ1_38 (CF),

Start 56:

- Found in 1 of 265 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA4_40 (singleton),

Start 57:

- Found in 29 of 265 (10.9%) of genes in pham
- Manual Annotations of this start: 27 of 250
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alkhayr_13 (O), Ashwin_14 (O), Blessica_12 (O), Bora_13 (O), Catdawg_12 (O), Corndog_15 (O), Dylan_13 (O), Familton_13 (O), Firecracker_13 (O), FoulBall_12 (O), Idergollasper_12 (O), JangDynasty_12 (O), Krili_13 (O), MadKillah_14 (O), Mori_13 (O), Murai_13 (O), NiebruSaylor_13 (O), Ryadel_15 (O), SchoolBus_12 (O), Schuy_14 (O), Shida_13 (O), Smooch_14 (O), TelAviv_12 (O), Vagabond_13 (O), Vorrps_13 (O), Wildflower_13 (O), Winget_13 (O), YungJamal_14 (O), Zakhe101_14 (O),

Start 58:

- Found in 1 of 265 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 250
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shagrat_70 (CF),

Start 59:

- Found in 1 of 265 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 250
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TinyDot_44 (singleton),

Summary by clusters:

There are 15 clusters represented in this pham: singleton, AG, K2, DI, CF, O, K4, K3, FA, K1, K7, K6, K5, DY, K8,

Info for manual annotations of cluster AG:

- Start number 37 was manually annotated 1 time for cluster AG.
- Start number 39 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster CF:

- Start number 54 was manually annotated 2 times for cluster CF.
- Start number 58 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster DI:

- Start number 25 was manually annotated 15 times for cluster DI.

Info for manual annotations of cluster DY:

- Start number 50 was manually annotated 1 time for cluster DY.
- Start number 51 was manually annotated 4 times for cluster DY.

Info for manual annotations of cluster FA:

- Start number 44 was manually annotated 10 times for cluster FA.

Info for manual annotations of cluster K1:

- Start number 41 was manually annotated 4 times for cluster K1.
- Start number 42 was manually annotated 99 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 42 was manually annotated 10 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 42 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 46 was manually annotated 19 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 40 was manually annotated 22 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 41 was manually annotated 1 time for cluster K6.
- Start number 42 was manually annotated 21 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 46 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 46 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster O:

- Start number 57 was manually annotated 27 times for cluster O.

Gene Information:

Gene: ActinUp_61 Start: 41286, Stop: 42173, Start Num: 42

Candidate Starts for ActinUp_61:

(Start: 42 @41286 has 138 MA's), (71, 41397), (88, 41496), (106, 41646), (120, 41718), (125, 41772), (137, 41856), (143, 41913), (150, 41961), (163, 42027), (174, 42087), (176, 42102), (182, 42144),

Gene: Adephagia_61 Start: 41293, Stop: 42171, Start Num: 42

Candidate Starts for Adephagia_61:

(Start: 42 @41293 has 138 MA's), (71, 41404), (88, 41503), (120, 41725), (125, 41779), (137, 41854), (143, 41911), (150, 41959), (163, 42025), (172, 42073), (174, 42085), (176, 42100),

Gene: Adonis_61 Start: 41528, Stop: 42406, Start Num: 42

Candidate Starts for Adonis_61:

(Start: 42 @41528 has 138 MA's), (71, 41639), (78, 41675), (88, 41738), (106, 41888), (120, 41960), (125, 42014), (137, 42089), (143, 42146), (150, 42194), (163, 42260), (172, 42308), (174, 42320), (176, 42335),

Gene: Agent47_55 Start: 38528, Stop: 39388, Start Num: 40

Candidate Starts for Agent47_55:

(Start: 40 @38528 has 22 MA's), (78, 38678), (106, 38891), (113, 38903), (120, 38942), (121, 38954), (122, 38972), (125, 38996), (135, 39059), (136, 39062), (147, 39143), (152, 39203), (155, 39215), (165, 39248), (167, 39257), (174, 39302), (182, 39359), (187, 39380),

Gene: Ageofdapage_64 Start: 42266, Stop: 43153, Start Num: 42

Candidate Starts for Ageofdapage_64:

(Start: 42 @42266 has 138 MA's), (71, 42377), (88, 42476), (120, 42698), (125, 42752), (137, 42836), (143, 42893), (150, 42941), (163, 43007), (173, 43058), (174, 43067), (176, 43082),

Gene: AlishaPH_61 Start: 41554, Stop: 42432, Start Num: 42

Candidate Starts for AlishaPH_61:

(Start: 42 @41554 has 138 MA's), (71, 41665), (88, 41764), (120, 41986), (125, 42040), (137, 42115), (143, 42172), (150, 42220), (163, 42286), (172, 42334), (174, 42346), (176, 42361),

Gene: Alkhayr_13 Start: 5075, Stop: 5824, Start Num: 57

Candidate Starts for Alkhayr_13:

(Start: 57 @5075 has 27 MA's), (71, 5141), (84, 5219), (89, 5243), (95, 5303), (102, 5345), (116, 5381), (125, 5441), (143, 5570), (150, 5618), (155, 5657), (168, 5705),

Gene: AlleyCat_57 Start: 38832, Stop: 39692, Start Num: 40

Candidate Starts for AlleyCat_57:

(Start: 40 @38832 has 22 MA's), (71, 38946), (78, 38982), (89, 39048), (106, 39195), (113, 39207), (120, 39246), (122, 39276), (125, 39300), (142, 39423), (165, 39552), (167, 39561), (172, 39594), (174, 39606), (182, 39663), (187, 39684),

Gene: Amelie_50 Start: 38595, Stop: 39482, Start Num: 42

Candidate Starts for Amelie_50:

(Start: 42 @38595 has 138 MA's), (71, 38706), (88, 38805), (106, 38955), (115, 38988), (120, 39027), (125, 39081), (137, 39165), (142, 39213), (143, 39222), (147, 39237), (150, 39270), (172, 39384), (176, 39411),

Gene: Amgine_59 Start: 41956, Stop: 42834, Start Num: 42

Candidate Starts for Amgine_59:

(Start: 42 @41956 has 138 MA's), (71, 42067), (99, 42256), (106, 42316), (108, 42319), (119, 42382), (120, 42388), (137, 42517), (143, 42574), (150, 42622), (152, 42649), (164, 42691), (173, 42739),

(176, 42763), (182, 42805),

Gene: Aminay_61 Start: 40983, Stop: 41852, Start Num: 46

Candidate Starts for Aminay_61:

(Start: 42 @40962 has 138 MA's), (Start: 46 @40983 has 21 MA's), (63, 41019), (103, 41292), (125, 41448), (139, 41535), (143, 41580), (148, 41610), (163, 41694), (173, 41745), (180, 41808),

Gene: Amohnition_60 Start: 41578, Stop: 42447, Start Num: 42

Candidate Starts for Amohnition_60:

(Start: 42 @41578 has 138 MA's), (71, 41689), (106, 41938), (119, 41998), (120, 42004), (137, 42133), (143, 42190), (150, 42238), (152, 42265), (164, 42307), (173, 42355), (176, 42379),

Gene: Anaya_63 Start: 41812, Stop: 42690, Start Num: 42

Candidate Starts for Anaya_63:

(Start: 42 @41812 has 138 MA's), (71, 41923), (88, 42022), (106, 42172), (120, 42244), (125, 42298), (137, 42373), (143, 42430), (150, 42478), (163, 42544), (172, 42592), (174, 42604), (176, 42619),

Gene: Angelica_61 Start: 41436, Stop: 42323, Start Num: 42

Candidate Starts for Angelica_61:

(Start: 42 @41436 has 138 MA's), (71, 41547), (88, 41646), (106, 41796), (120, 41868), (125, 41922), (137, 42006), (143, 42063), (150, 42111), (163, 42177), (173, 42228), (174, 42237), (176, 42252), (182, 42294),

Gene: Apocalypse_64 Start: 42202, Stop: 43089, Start Num: 42

Candidate Starts for Apocalypse_64:

(Start: 42 @42202 has 138 MA's), (69, 42295), (71, 42313), (88, 42412), (106, 42562), (120, 42634), (125, 42688), (137, 42772), (143, 42829), (150, 42877), (163, 42943), (173, 42994), (174, 43003), (176, 43018), (182, 43060),

Gene: Asayake_61 Start: 41608, Stop: 42486, Start Num: 42

Candidate Starts for Asayake_61:

(Start: 42 @41608 has 138 MA's), (71, 41719), (88, 41818), (120, 42040), (125, 42094), (137, 42169), (143, 42226), (150, 42274), (163, 42340), (172, 42388), (174, 42400), (176, 42415),

Gene: Ashwin_14 Start: 5310, Stop: 6059, Start Num: 57

Candidate Starts for Ashwin_14:

(Start: 57 @5310 has 27 MA's), (71, 5376), (84, 5454), (89, 5478), (95, 5538), (102, 5580), (105, 5601), (116, 5616), (125, 5676), (143, 5805), (150, 5853), (155, 5892), (168, 5940),

Gene: Atiba_62 Start: 41256, Stop: 42134, Start Num: 42

Candidate Starts for Atiba_62:

(Start: 42 @41256 has 138 MA's), (71, 41367), (88, 41466), (120, 41688), (125, 41742), (137, 41817), (143, 41874), (150, 41922), (163, 41988), (172, 42036), (174, 42048), (176, 42063),

Gene: Ayotoya_47 Start: 34657, Stop: 35544, Start Num: 25

Candidate Starts for Ayotoya_47:

(11, 34429), (13, 34504), (14, 34513), (19, 34552), (Start: 25 @34657 has 15 MA's), (27, 34678), (55, 34768), (64, 34795), (68, 34813), (80, 34882), (128, 35167), (130, 35176), (131, 35182), (144, 35269), (145, 35272), (150, 35314), (152, 35341), (158, 35368), (160, 35374), (164, 35383), (166, 35392),

Gene: BEEST_61 Start: 41608, Stop: 42486, Start Num: 42

Candidate Starts for BEEST_61:

(Start: 42 @41608 has 138 MA's), (71, 41719), (88, 41818), (120, 42040), (125, 42094), (137, 42169), (143, 42226), (150, 42274), (163, 42340), (172, 42388), (174, 42400), (176, 42415),

Gene: BGlluviae_61 Start: 41411, Stop: 42289, Start Num: 42

Candidate Starts for BGlluviae_61:

(Start: 42 @41411 has 138 MA's), (71, 41522), (88, 41621), (120, 41843), (125, 41897), (137, 41972), (143, 42029), (150, 42077), (163, 42143), (172, 42191), (174, 42203), (176, 42218),

Gene: BaghaKamala_60 Start: 40637, Stop: 41524, Start Num: 42

Candidate Starts for BaghaKamala_60:

(Start: 42 @40637 has 138 MA's), (71, 40748), (88, 40847), (106, 40997), (120, 41069), (125, 41123), (137, 41207), (143, 41264), (150, 41312), (163, 41378), (167, 41393), (174, 41438), (176, 41453), (182, 41495),

Gene: BarrelRoll_61 Start: 41260, Stop: 42147, Start Num: 42

Candidate Starts for BarrelRoll_61:

(Start: 42 @41260 has 138 MA's), (69, 41353), (71, 41371), (88, 41470), (106, 41620), (120, 41692), (125, 41746), (137, 41830), (143, 41887), (150, 41935), (163, 42001), (174, 42061), (176, 42076), (182, 42118),

Gene: Beezoo_63 Start: 42244, Stop: 43122, Start Num: 42

Candidate Starts for Beezoo_63:

(Start: 42 @42244 has 138 MA's), (71, 42355), (88, 42454), (106, 42604), (120, 42676), (125, 42730), (137, 42805), (143, 42862), (150, 42910), (163, 42976), (172, 43024), (174, 43036), (176, 43051),

Gene: Bella96_62 Start: 42019, Stop: 42900, Start Num: 42

Candidate Starts for Bella96_62:

(Start: 42 @42019 has 138 MA's), (71, 42130), (88, 42229), (120, 42454), (125, 42508), (137, 42583), (143, 42640), (150, 42688), (163, 42754), (172, 42802), (174, 42814), (176, 42829),

Gene: Belladonna_61 Start: 41411, Stop: 42289, Start Num: 42

Candidate Starts for Belladonna_61:

(Start: 42 @41411 has 138 MA's), (71, 41522), (88, 41621), (120, 41843), (125, 41897), (137, 41972), (143, 42029), (150, 42077), (163, 42143), (172, 42191), (174, 42203), (176, 42218),

Gene: BetterKatz_47 Start: 34191, Stop: 35018, Start Num: 25

Candidate Starts for BetterKatz_47:

(13, 34029), (14, 34038), (19, 34077), (Start: 25 @34191 has 15 MA's), (38, 34206), (43, 34215), (64, 34269), (68, 34287), (80, 34356), (128, 34641), (130, 34650), (131, 34656), (144, 34743), (150, 34788), (152, 34815), (158, 34842), (160, 34848), (164, 34857), (166, 34866),

Gene: Binglebops_50 Start: 38595, Stop: 39482, Start Num: 42

Candidate Starts for Binglebops_50:

(Start: 42 @38595 has 138 MA's), (71, 38706), (88, 38805), (106, 38955), (115, 38988), (120, 39027), (125, 39081), (137, 39165), (142, 39213), (143, 39222), (147, 39237), (150, 39270), (172, 39384), (176, 39411),

Gene: Blessica_12 Start: 4707, Stop: 5456, Start Num: 57

Candidate Starts for Blessica_12:

(Start: 57 @4707 has 27 MA's), (71, 4773), (84, 4851), (89, 4875), (95, 4935), (102, 4977), (116, 5013), (125, 5073), (143, 5202), (150, 5250), (155, 5289), (168, 5337),

Gene: Blizzard_61 Start: 41608, Stop: 42486, Start Num: 42

Candidate Starts for Blizzard_61:

(Start: 42 @41608 has 138 MA's), (71, 41719), (88, 41818), (120, 42040), (125, 42094), (137, 42169), (143, 42226), (150, 42274), (163, 42340), (172, 42388), (174, 42400), (176, 42415),

Gene: Bock_47 Start: 33880, Stop: 34767, Start Num: 25

Candidate Starts for Bock_47:

(13, 33727), (14, 33736), (19, 33775), (Start: 25 @33880 has 15 MA's), (27, 33901), (55, 33991), (64, 34018), (68, 34036), (80, 34105), (128, 34390), (130, 34399), (131, 34405), (144, 34492), (145, 34495), (150, 34537), (152, 34564), (158, 34591), (160, 34597), (164, 34606), (166, 34615),

Gene: Boiiii_61 Start: 41610, Stop: 42488, Start Num: 42

Candidate Starts for Boiiii_61:

(Start: 42 @41610 has 138 MA's), (71, 41721), (88, 41820), (120, 42042), (125, 42096), (137, 42171), (143, 42228), (150, 42276), (163, 42342), (172, 42390), (174, 42402), (176, 42417),

Gene: Boilgate_56 Start: 40641, Stop: 41474, Start Num: 46

Candidate Starts for Boilgate_56:

(Start: 46 @40641 has 21 MA's), (71, 40722), (137, 41154), (139, 41166), (143, 41211), (167, 41340), (172, 41373),

Gene: BoostSeason_62 Start: 42960, Stop: 43817, Start Num: 42

Candidate Starts for BoostSeason_62:

(Start: 42 @42960 has 138 MA's), (71, 43065), (88, 43164), (120, 43374), (150, 43608), (164, 43677), (173, 43725), (174, 43734), (176, 43749),

Gene: Bora_13 Start: 5108, Stop: 5857, Start Num: 57

Candidate Starts for Bora_13:

(Start: 57 @5108 has 27 MA's), (71, 5174), (84, 5252), (89, 5276), (95, 5336), (102, 5378), (116, 5414), (125, 5474), (143, 5603), (150, 5651), (155, 5690), (168, 5738),

Gene: Bridgette_48 Start: 31057, Stop: 31863, Start Num: 44

Candidate Starts for Bridgette_48:

(Start: 44 @31057 has 10 MA's), (49, 31066), (53, 31081), (72, 31168), (75, 31180), (81, 31228), (94, 31312), (107, 31393), (125, 31480), (140, 31588), (143, 31612), (144, 31615), (157, 31711), (169, 31759),

Gene: Bryler_63 Start: 40754, Stop: 41653, Start Num: 42

Candidate Starts for Bryler_63:

(7, 40424), (17, 40571), (19, 40577), (28, 40715), (Start: 42 @40754 has 138 MA's), (62, 40814), (71, 40865), (84, 40943), (85, 40952), (89, 40967), (99, 41054), (119, 41180), (120, 41186), (137, 41336), (143, 41393), (150, 41441), (152, 41468), (176, 41582), (178, 41606),

Gene: Brylie_47 Start: 33927, Stop: 34814, Start Num: 25

Candidate Starts for Brylie_47:

(13, 33774), (14, 33783), (19, 33822), (Start: 25 @33927 has 15 MA's), (27, 33948), (55, 34038), (64, 34065), (68, 34083), (128, 34437), (130, 34446), (131, 34452), (144, 34539), (145, 34542), (150, 34584), (152, 34611), (158, 34638), (160, 34644), (164, 34653), (166, 34662),

Gene: CREW_61 Start: 41411, Stop: 42289, Start Num: 42

Candidate Starts for CREW_61:

(Start: 42 @41411 has 138 MA's), (71, 41522), (88, 41621), (120, 41843), (125, 41897), (137, 41972), (143, 42029), (150, 42077), (163, 42143), (172, 42191), (174, 42203), (176, 42218),

Gene: Cain_63 Start: 40742, Stop: 41641, Start Num: 42

Candidate Starts for Cain_63:

(7, 40412), (17, 40559), (19, 40565), (28, 40703), (Start: 42 @40742 has 138 MA's), (62, 40802), (71, 40853), (84, 40931), (85, 40940), (89, 40955), (99, 41042), (119, 41168), (120, 41174), (137, 41324), (143, 41381), (150, 41429), (152, 41456), (176, 41570), (178, 41594),

Gene: Capricorn_61 Start: 41411, Stop: 42289, Start Num: 42

Candidate Starts for Capricorn_61:

(Start: 42 @41411 has 138 MA's), (71, 41522), (88, 41621), (120, 41843), (125, 41897), (137, 41972), (143, 42029), (150, 42077), (163, 42143), (172, 42191), (174, 42203), (176, 42218),

Gene: CaseJules_63 Start: 41608, Stop: 42486, Start Num: 42

Candidate Starts for CaseJules_63:

(Start: 42 @41608 has 138 MA's), (71, 41719), (88, 41818), (120, 42040), (125, 42094), (137, 42169), (143, 42226), (150, 42274), (163, 42340), (172, 42388), (174, 42400), (176, 42415),

Gene: Catdawg_12 Start: 4747, Stop: 5496, Start Num: 57

Candidate Starts for Catdawg_12:

(Start: 57 @4747 has 27 MA's), (71, 4813), (84, 4891), (89, 4915), (95, 4975), (102, 5017), (116, 5053), (125, 5113), (143, 5242), (150, 5290), (155, 5329), (168, 5377),

Gene: Chancellor_64 Start: 40918, Stop: 41781, Start Num: 46

Candidate Starts for Chancellor_64:

(33, 40882), (Start: 42 @40897 has 138 MA's), (Start: 46 @40918 has 21 MA's), (60, 40951), (65, 40972), (78, 41047), (119, 41326), (120, 41332), (126, 41395), (135, 41449), (143, 41518), (150, 41566), (164, 41635), (179, 41743), (180, 41746),

Gene: CheetoDust_60 Start: 40684, Stop: 41571, Start Num: 42

Candidate Starts for CheetoDust_60:

(Start: 42 @40684 has 138 MA's), (71, 40795), (88, 40894), (106, 41044), (120, 41116), (125, 41170), (137, 41254), (143, 41311), (150, 41359), (163, 41425), (167, 41440), (174, 41485), (176, 41500),

Gene: Cheetobro_64 Start: 40915, Stop: 41778, Start Num: 46

Candidate Starts for Cheetobro_64:

(33, 40879), (Start: 42 @40894 has 138 MA's), (Start: 46 @40915 has 21 MA's), (60, 40948), (65, 40969), (78, 41044), (119, 41323), (120, 41329), (126, 41392), (135, 41446), (143, 41515), (150, 41563), (164, 41632), (179, 41740), (180, 41743),

Gene: Chop_47 Start: 34404, Stop: 35291, Start Num: 25

Candidate Starts for Chop_47:

(11, 34176), (13, 34251), (14, 34260), (19, 34299), (Start: 25 @34404 has 15 MA's), (27, 34425), (55, 34515), (64, 34542), (68, 34560), (80, 34629), (128, 34914), (130, 34923), (131, 34929), (144, 35016), (145, 35019), (150, 35061), (152, 35088), (158, 35115), (160, 35121), (164, 35130), (166, 35139),

Gene: Chris_62 Start: 41865, Stop: 42770, Start Num: 42

Candidate Starts for Chris_62:

(Start: 42 @41865 has 138 MA's), (81, 42039), (85, 42063), (89, 42078), (106, 42225), (119, 42294), (120, 42300), (133, 42426), (148, 42540), (149, 42543), (152, 42585), (164, 42627), (172, 42672), (176, 42699), (177, 42717),

Gene: ChuckDuck_48 Start: 30497, Stop: 31303, Start Num: 44

Candidate Starts for ChuckDuck_48:

(34, 30470), (36, 30473), (Start: 44 @30497 has 10 MA's), (53, 30521), (72, 30608), (75, 30620), (81, 30668), (107, 30833), (135, 30983), (140, 31028), (144, 31055), (157, 31151),

Gene: Collard_53 Start: 38489, Stop: 39349, Start Num: 40

Candidate Starts for Collard_53:

(Start: 40 @38489 has 22 MA's), (78, 38639), (106, 38852), (113, 38864), (120, 38903), (121, 38915), (122, 38933), (125, 38957), (135, 39020), (136, 39023), (147, 39104), (152, 39164), (155, 39176), (165, 39209), (167, 39218), (174, 39263), (182, 39320), (187, 39341),

Gene: Constance_46 Start: 30686, Stop: 31492, Start Num: 44

Candidate Starts for Constance_46:

(Start: 44 @30686 has 10 MA's), (53, 30710), (72, 30797), (75, 30809), (81, 30857), (107, 31022), (125, 31109), (140, 31217), (143, 31241), (144, 31244), (157, 31340), (169, 31388),

Gene: Corndog_15 Start: 5422, Stop: 6171, Start Num: 57

Candidate Starts for Corndog_15:

(Start: 57 @5422 has 27 MA's), (71, 5488), (84, 5566), (89, 5590), (95, 5650), (102, 5692), (116, 5728), (125, 5788), (143, 5917), (150, 5965), (155, 6004), (168, 6052),

Gene: CrimD_62 Start: 41817, Stop: 42695, Start Num: 42

Candidate Starts for CrimD_62:

(Start: 42 @41817 has 138 MA's), (71, 41928), (88, 42027), (120, 42249), (125, 42303), (137, 42378), (143, 42435), (150, 42483), (163, 42549), (172, 42597), (174, 42609), (176, 42624),

Gene: Curiosium_65 Start: 40936, Stop: 41826, Start Num: 42

Candidate Starts for Curiosium_65:

(12, 40654), (22, 40804), (29, 40900), (31, 40915), (Start: 42 @40936 has 138 MA's), (71, 41047), (85, 41134), (88, 41146), (120, 41371), (125, 41425), (137, 41509), (150, 41614), (172, 41728), (174, 41740), (176, 41755),

Gene: Dadosky_57 Start: 38834, Stop: 39694, Start Num: 40

Candidate Starts for Dadosky_57:

(Start: 40 @38834 has 22 MA's), (71, 38948), (78, 38984), (89, 39050), (106, 39197), (113, 39209), (120, 39248), (122, 39278), (125, 39302), (142, 39425), (165, 39554), (167, 39563), (172, 39596), (174, 39608), (182, 39665), (187, 39686),

Gene: Dalmuri_61 Start: 41411, Stop: 42289, Start Num: 42

Candidate Starts for Dalmuri_61:

(Start: 42 @41411 has 138 MA's), (71, 41522), (88, 41621), (120, 41843), (125, 41897), (137, 41972), (143, 42029), (150, 42077), (163, 42143), (172, 42191), (174, 42203), (176, 42218),

Gene: DarthP_60 Start: 41432, Stop: 42301, Start Num: 42

Candidate Starts for DarthP_60:

(Start: 42 @41432 has 138 MA's), (71, 41543), (106, 41792), (119, 41852), (120, 41858), (137, 41987), (143, 42044), (150, 42092), (152, 42119), (164, 42161), (173, 42209), (176, 42233),

Gene: Dartin_62 Start: 41510, Stop: 42397, Start Num: 42

Candidate Starts for Dartin_62:

(Start: 42 @41510 has 138 MA's), (71, 41621), (88, 41720), (89, 41723), (106, 41870), (119, 41936), (120, 41942), (125, 41996), (137, 42080), (143, 42137), (150, 42185), (173, 42302), (174, 42311), (176, 42326), (178, 42350), (181, 42365),

Gene: Deby_61 Start: 41461, Stop: 42348, Start Num: 42

Candidate Starts for Deby_61:

(Start: 42 @41461 has 138 MA's), (71, 41572), (88, 41671), (106, 41821), (120, 41893), (125, 41947), (137, 42031), (143, 42088), (150, 42136), (163, 42202), (174, 42262), (176, 42277), (182, 42319),

Gene: DelRio_48 Start: 35109, Stop: 35996, Start Num: 25

Candidate Starts for DelRio_48:

(13, 34956), (14, 34965), (19, 35004), (Start: 25 @35109 has 15 MA's), (27, 35130), (55, 35220), (64, 35247), (68, 35265), (80, 35334), (128, 35619), (130, 35628), (131, 35634), (141, 35703), (144, 35721), (145, 35724), (152, 35793), (158, 35820), (160, 35826), (164, 35835), (166, 35844),

Gene: Devera_68 Start: 42823, Stop: 43710, Start Num: 42

Candidate Starts for Devera_68:

(Start: 42 @42823 has 138 MA's), (71, 42934), (85, 43021), (88, 43033), (120, 43255), (125, 43309), (137, 43393), (143, 43450), (150, 43498), (163, 43564), (173, 43615), (174, 43624), (176, 43639),

Gene: DismalFunk_62 Start: 43382, Stop: 44239, Start Num: 42

Candidate Starts for DismalFunk_62:

(Start: 42 @43382 has 138 MA's), (71, 43487), (88, 43586), (120, 43796), (150, 44030), (164, 44099), (173, 44147), (174, 44156), (176, 44171),

Gene: DismalStressor_62 Start: 43382, Stop: 44239, Start Num: 42

Candidate Starts for DismalStressor_62:

(Start: 42 @43382 has 138 MA's), (71, 43487), (88, 43586), (120, 43796), (150, 44030), (164, 44099), (173, 44147), (174, 44156), (176, 44171),

Gene: Dole_66 Start: 42826, Stop: 43713, Start Num: 42

Candidate Starts for Dole_66:

(Start: 42 @42826 has 138 MA's), (71, 42937), (85, 43024), (88, 43036), (120, 43258), (125, 43312), (137, 43396), (143, 43453), (150, 43501), (163, 43567), (173, 43618), (174, 43627), (176, 43642),

Gene: DonkeyMan_39 Start: 29056, Stop: 29817, Start Num: 51

Candidate Starts for DonkeyMan_39:

(15, 28825), (23, 28906), (32, 29005), (Start: 51 @29056 has 4 MA's), (70, 29122), (89, 29233), (97, 29308), (98, 29320), (127, 29464), (140, 29539), (143, 29563), (146, 29572), (157, 29662), (164, 29680), (176, 29752),

Gene: DrHayes_62 Start: 42174, Stop: 43055, Start Num: 42

Candidate Starts for DrHayes_62:

(Start: 42 @42174 has 138 MA's), (71, 42285), (88, 42384), (120, 42609), (125, 42663), (137, 42738), (143, 42795), (150, 42843), (163, 42909), (172, 42957), (174, 42969), (176, 42984),

Gene: Durfee_61 Start: 41608, Stop: 42486, Start Num: 42

Candidate Starts for Durfee_61:

(Start: 42 @41608 has 138 MA's), (71, 41719), (88, 41818), (120, 42040), (125, 42094), (137, 42169), (143, 42226), (150, 42274), (163, 42340), (172, 42388), (174, 42400), (176, 42415),

Gene: Dylan_13 Start: 5310, Stop: 6059, Start Num: 57

Candidate Starts for Dylan_13:

(Start: 57 @5310 has 27 MA's), (71, 5376), (84, 5454), (89, 5478), (95, 5538), (102, 5580), (105, 5601), (116, 5616), (125, 5676), (143, 5805), (150, 5853), (155, 5892), (168, 5940),

Gene: Edugator_54 Start: 40255, Stop: 41115, Start Num: 40

Candidate Starts for Edugator_54:

(Start: 40 @40255 has 22 MA's), (68, 40348), (71, 40369), (81, 40432), (89, 40471), (100, 40561), (106, 40618), (113, 40630), (120, 40669), (122, 40699), (125, 40723), (142, 40846), (165, 40975), (167, 40984), (172, 41017), (174, 41029), (182, 41086), (187, 41107),

Gene: Efra2_65 Start: 41374, Stop: 42279, Start Num: 42

Candidate Starts for Efra2_65:

(Start: 42 @41374 has 138 MA's), (88, 41584), (120, 41824), (125, 41878), (137, 41962), (147, 42034), (150, 42067), (163, 42133), (173, 42184), (174, 42193), (176, 42208),

Gene: Eileen_43 Start: 29004, Stop: 29810, Start Num: 44

Candidate Starts for Eileen_43:

(Start: 44 @29004 has 10 MA's), (53, 29028), (72, 29115), (75, 29127), (81, 29175), (107, 29340), (125, 29427), (140, 29535), (143, 29559), (144, 29562), (157, 29658),

Gene: Ekdilam_58 Start: 41462, Stop: 42331, Start Num: 42

Candidate Starts for Ekdilam_58:

(2, 40907), (8, 41147), (Start: 42 @41462 has 138 MA's), (71, 41573), (106, 41822), (112, 41834), (119, 41882), (120, 41888), (137, 42017), (143, 42074), (150, 42122), (152, 42149), (164, 42191), (173, 42239), (176, 42263),

Gene: Ellie_56 Start: 40800, Stop: 41699, Start Num: 42

Candidate Starts for Ellie_56:

(Start: 42 @40800 has 138 MA's), (71, 40911), (81, 40974), (91, 41019), (99, 41100), (106, 41160), (119, 41226), (120, 41232), (137, 41382), (143, 41439), (150, 41487), (157, 41538), (164, 41556), (173, 41604), (175, 41622), (176, 41628),

Gene: Emerson_62 Start: 41277, Stop: 42155, Start Num: 42

Candidate Starts for Emerson_62:

(Start: 42 @41277 has 138 MA's), (71, 41388), (88, 41487), (106, 41637), (120, 41709), (125, 41763), (137, 41838), (143, 41895), (150, 41943), (163, 42009), (172, 42057), (174, 42069), (176, 42084),

Gene: Enkosi_52 Start: 41208, Stop: 42095, Start Num: 42

Candidate Starts for Enkosi_52:

(Start: 42 @41208 has 138 MA's), (71, 41319), (88, 41418), (106, 41568), (115, 41601), (120, 41640), (125, 41694), (137, 41778), (142, 41826), (143, 41835), (147, 41850), (150, 41883), (172, 41997), (176, 42024),

Gene: Eponine_66 Start: 41761, Stop: 42624, Start Num: 46

Candidate Starts for Eponine_66:

(33, 41725), (Start: 42 @41740 has 138 MA's), (Start: 46 @41761 has 21 MA's), (60, 41794), (65, 41815), (78, 41890), (119, 42169), (120, 42175), (126, 42238), (135, 42292), (143, 42361), (150, 42409), (164, 42478), (179, 42586), (180, 42589),

Gene: Familton_13 Start: 4748, Stop: 5497, Start Num: 57

Candidate Starts for Familton_13:

(Start: 57 @4748 has 27 MA's), (71, 4814), (84, 4892), (89, 4916), (95, 4976), (102, 5018), (116, 5054), (125, 5114), (143, 5243), (150, 5291), (155, 5330), (168, 5378),

Gene: Fefferhead_58 Start: 40735, Stop: 41613, Start Num: 42

Candidate Starts for Fefferhead_58:

(Start: 42 @40735 has 138 MA's), (71, 40846), (99, 41035), (106, 41095), (119, 41161), (120, 41167), (137, 41296), (143, 41353), (150, 41401), (152, 41428), (164, 41470), (173, 41518), (176, 41542),

Gene: Feyre_58 Start: 42214, Stop: 43074, Start Num: 40

Candidate Starts for Feyre_58:

(Start: 40 @42214 has 22 MA's), (68, 42307), (71, 42328), (106, 42577), (113, 42589), (120, 42628), (121, 42640), (122, 42658), (125, 42682), (136, 42748), (139, 42769), (142, 42805), (149, 42847), (155, 42901), (163, 42928), (165, 42934), (172, 42976), (174, 42988), (182, 43045), (187, 43066),

Gene: Findley_62 Start: 43375, Stop: 44232, Start Num: 42

Candidate Starts for Findley_62:

(1, 42673), (Start: 42 @43375 has 138 MA's), (71, 43480), (88, 43579), (120, 43789), (150, 44023), (164, 44092), (173, 44140), (174, 44149), (176, 44164),

Gene: Fionnbharth_64 Start: 41159, Stop: 42022, Start Num: 46

Candidate Starts for Fionnbharth_64:

(33, 41123), (Start: 42 @41138 has 138 MA's), (Start: 46 @41159 has 21 MA's), (60, 41192), (65, 41213), (78, 41288), (119, 41567), (120, 41573), (126, 41636), (135, 41690), (143, 41759), (150, 41807), (164, 41876), (179, 41984), (180, 41987),

Gene: Firecracker_13 Start: 5043, Stop: 5792, Start Num: 57

Candidate Starts for Firecracker_13:

(Start: 57 @5043 has 27 MA's), (71, 5109), (84, 5187), (89, 5211), (95, 5271), (102, 5313), (116, 5349), (125, 5409), (143, 5538), (150, 5586), (155, 5625), (168, 5673),

Gene: FoulBall_12 Start: 4748, Stop: 5497, Start Num: 57

Candidate Starts for FoulBall_12:

(Start: 57 @4748 has 27 MA's), (71, 4814), (84, 4892), (89, 4916), (95, 4976), (102, 5018), (116, 5054), (125, 5114), (143, 5243), (150, 5291), (155, 5330), (168, 5378),

Gene: Francois_46 Start: 34002, Stop: 34811, Start Num: 25

Candidate Starts for Francois_46:

(13, 33849), (14, 33858), (19, 33897), (Start: 25 @34002 has 15 MA's), (43, 34026), (45, 34044), (64, 34080), (128, 34452), (130, 34461), (131, 34467), (135, 34482), (139, 34506), (142, 34542), (144, 34554), (150, 34599), (155, 34638), (158, 34653), (164, 34668), (166, 34677), (183, 34800),

Gene: GMA4_40 Start: 30065, Stop: 30856, Start Num: 56

Candidate Starts for GMA4_40:

(9, 29687), (18, 29828), (20, 29849), (56, 30065), (65, 30098), (71, 30137), (93, 30284), (98, 30323), (124, 30437), (136, 30503), (146, 30578), (148, 30599), (149, 30602), (161, 30677), (170, 30716), (186, 30815),

Gene: Ganymede_62 Start: 41672, Stop: 42550, Start Num: 42

Candidate Starts for Ganymede_62:

(Start: 42 @41672 has 138 MA's), (71, 41783), (88, 41882), (106, 42032), (120, 42104), (125, 42158), (137, 42233), (143, 42290), (150, 42338), (163, 42404), (172, 42452), (174, 42464), (176, 42479),

Gene: Gengar_55 Start: 40233, Stop: 41093, Start Num: 40

Candidate Starts for Gengar_55:

(Start: 40 @40233 has 22 MA's), (68, 40326), (71, 40347), (106, 40596), (113, 40608), (119, 40641), (120, 40647), (121, 40659), (122, 40677), (125, 40701), (136, 40767), (142, 40824), (149, 40866), (155, 40920), (163, 40947), (165, 40953), (172, 40995), (174, 41007), (182, 41064), (187, 41085),

Gene: Geraldini_64 Start: 42329, Stop: 43207, Start Num: 42

Candidate Starts for Geraldini_64:

(Start: 42 @42329 has 138 MA's), (71, 42440), (88, 42539), (106, 42689), (120, 42761), (125, 42815), (137, 42890), (143, 42947), (150, 42995), (163, 43061), (172, 43109), (174, 43121), (176, 43136),

Gene: GlobiWarming_48 Start: 30454, Stop: 31260, Start Num: 44

Candidate Starts for GlobiWarming_48:

(Start: 44 @30454 has 10 MA's), (49, 30463), (53, 30478), (72, 30565), (75, 30577), (81, 30625), (107, 30790), (125, 30877), (140, 30985), (143, 31009), (144, 31012), (157, 31108), (169, 31156),

Gene: GrandSlam_47 Start: 34404, Stop: 35291, Start Num: 25

Candidate Starts for GrandSlam_47:

(11, 34176), (13, 34251), (14, 34260), (19, 34299), (Start: 25 @34404 has 15 MA's), (27, 34425), (55, 34515), (64, 34542), (68, 34560), (80, 34629), (128, 34914), (130, 34923), (131, 34929), (144, 35016), (145, 35019), (150, 35061), (152, 35088), (158, 35115), (160, 35121), (164, 35130), (166, 35139),

Gene: Guanica15_64 Start: 41115, Stop: 42020, Start Num: 42

Candidate Starts for Guanica15_64:

(Start: 42 @41115 has 138 MA's), (71, 41226), (88, 41325), (120, 41565), (125, 41619), (137, 41703), (150, 41808), (163, 41874), (173, 41925), (174, 41934), (176, 41949),

Gene: Guillsminger_56 Start: 40204, Stop: 41064, Start Num: 40

Candidate Starts for Guillsminger_56:

(Start: 40 @40204 has 22 MA's), (71, 40318), (106, 40567), (113, 40579), (121, 40630), (122, 40648), (125, 40672), (136, 40738), (139, 40759), (142, 40795), (149, 40837), (155, 40891), (163, 40918), (165, 40924), (172, 40966), (174, 40978), (182, 41035), (187, 41056),

Gene: Hammy_60 Start: 41420, Stop: 42289, Start Num: 42

Candidate Starts for Hammy_60:

(Start: 42 @41420 has 138 MA's), (71, 41531), (87, 41624), (106, 41780), (119, 41840), (120, 41846), (137, 41975), (143, 42032), (150, 42080), (152, 42107), (164, 42149), (173, 42197), (176, 42221),

Gene: Hamood_47 Start: 34404, Stop: 35291, Start Num: 25

Candidate Starts for Hamood_47:

(11, 34176), (13, 34251), (14, 34260), (19, 34299), (Start: 25 @34404 has 15 MA's), (27, 34425), (55, 34515), (64, 34542), (68, 34560), (80, 34629), (128, 34914), (130, 34923), (131, 34929), (144, 35016), (145, 35019), (150, 35061), (152, 35088), (158, 35115), (160, 35121), (164, 35130), (166, 35139),

Gene: HedwigODU_61 Start: 41286, Stop: 42173, Start Num: 42

Candidate Starts for HedwigODU_61:

(Start: 42 @41286 has 138 MA's), (71, 41397), (88, 41496), (106, 41646), (120, 41718), (125, 41772), (137, 41856), (143, 41913), (150, 41961), (163, 42027), (174, 42087), (176, 42102), (182, 42144),

Gene: Heftyboy_56 Start: 40576, Stop: 41436, Start Num: 40

Candidate Starts for Heftyboy_56:

(Start: 40 @40576 has 22 MA's), (68, 40669), (71, 40690), (106, 40939), (113, 40951), (119, 40984), (120, 40990), (121, 41002), (122, 41020), (125, 41044), (136, 41110), (142, 41167), (149, 41209), (155, 41263), (163, 41290), (165, 41296), (172, 41338), (174, 41350), (182, 41407), (187, 41428),

Gene: Heinz_40 Start: 27117, Stop: 27878, Start Num: 51

Candidate Starts for Heinz_40:

(Start: 51 @27117 has 4 MA's), (70, 27183), (89, 27294), (96, 27366), (97, 27369), (127, 27525), (129, 27531), (137, 27567), (146, 27633), (164, 27741), (176, 27813),

Gene: Hibiscus_40 Start: 27066, Stop: 27827, Start Num: 51

Candidate Starts for Hibiscus_40:

(Start: 51 @27066 has 4 MA's), (70, 27132), (89, 27243), (96, 27315), (97, 27318), (127, 27474), (129, 27480), (137, 27516), (146, 27582), (164, 27690), (176, 27762),

Gene: Homura_61 Start: 41411, Stop: 42289, Start Num: 42

Candidate Starts for Homura_61:

(Start: 42 @41411 has 138 MA's), (71, 41522), (88, 41621), (120, 41843), (125, 41897), (137, 41972), (143, 42029), (150, 42077), (163, 42143), (172, 42191), (174, 42203), (176, 42218),

Gene: Hurricane_60 Start: 41376, Stop: 42275, Start Num: 42

Candidate Starts for Hurricane_60:

(Start: 42 @41376 has 138 MA's), (71, 41487), (88, 41586), (91, 41595), (98, 41673), (106, 41736), (110, 41748), (111, 41766), (119, 41823), (137, 41958), (143, 42015), (150, 42063), (164, 42132), (171, 42171), (173, 42180), (176, 42204),

Gene: Hyperbowlee_61 Start: 41608, Stop: 42486, Start Num: 42

Candidate Starts for Hyperbowlee_61:

(Start: 42 @41608 has 138 MA's), (71, 41719), (88, 41818), (120, 42040), (125, 42094), (137, 42169), (143, 42226), (150, 42274), (163, 42340), (172, 42388), (174, 42400), (176, 42415),

Gene: Idergollasper_12 Start: 4748, Stop: 5497, Start Num: 57

Candidate Starts for Idergollasper_12:

(Start: 57 @4748 has 27 MA's), (71, 4814), (84, 4892), (89, 4916), (95, 4976), (102, 5018), (116, 5054), (125, 5114), (143, 5243), (150, 5291), (155, 5330), (168, 5378),

Gene: Illumine_66 Start: 42825, Stop: 43712, Start Num: 42

Candidate Starts for Illumine_66:

(Start: 42 @42825 has 138 MA's), (71, 42936), (85, 43023), (88, 43035), (120, 43257), (125, 43311), (137, 43395), (143, 43452), (150, 43500), (163, 43566), (173, 43617), (174, 43626), (176, 43641),

Gene: Inky_61 Start: 41411, Stop: 42289, Start Num: 42

Candidate Starts for Inky_61:

(Start: 42 @41411 has 138 MA's), (71, 41522), (88, 41621), (120, 41843), (125, 41897), (137, 41972), (143, 42029), (150, 42077), (163, 42143), (172, 42191), (174, 42203), (176, 42218),

Gene: InvictusManeo_53 Start: 38532, Stop: 39392, Start Num: 40

Candidate Starts for InvictusManeo_53:

(Start: 40 @38532 has 22 MA's), (78, 38682), (106, 38895), (113, 38907), (120, 38946), (121, 38958), (122, 38976), (125, 39000), (135, 39063), (136, 39066), (147, 39147), (152, 39207), (155, 39219), (165, 39252), (167, 39261), (174, 39306), (182, 39363), (187, 39384),

Gene: JAWS_61 Start: 41260, Stop: 42138, Start Num: 42

Candidate Starts for JAWS_61:

(Start: 42 @41260 has 138 MA's), (71, 41371), (88, 41470), (106, 41620), (120, 41692), (125, 41746), (137, 41821), (143, 41878), (150, 41926), (163, 41992), (172, 42040), (174, 42052), (176, 42067),

Gene: JF1_64 Start: 41076, Stop: 41939, Start Num: 46

Candidate Starts for JF1_64:

(33, 41040), (Start: 42 @41055 has 138 MA's), (Start: 46 @41076 has 21 MA's), (60, 41109), (65, 41130), (67, 41145), (78, 41205), (119, 41484), (120, 41490), (135, 41607), (143, 41676), (150, 41724), (164, 41793), (179, 41901), (180, 41904),

Gene: JangDynasty_12 Start: 4837, Stop: 5586, Start Num: 57

Candidate Starts for JangDynasty_12:

(Start: 57 @4837 has 27 MA's), (71, 4903), (84, 4981), (89, 5005), (95, 5065), (102, 5107), (116, 5143), (125, 5203), (143, 5332), (150, 5380), (155, 5419), (168, 5467),

Gene: Jarvi_61 Start: 41411, Stop: 42289, Start Num: 42

Candidate Starts for Jarvi_61:

(Start: 42 @41411 has 138 MA's), (71, 41522), (88, 41621), (120, 41843), (125, 41897), (137, 41972), (143, 42029), (150, 42077), (163, 42143), (172, 42191), (174, 42203), (176, 42218),

Gene: Jayhawk_62 Start: 41281, Stop: 42168, Start Num: 42

Candidate Starts for Jayhawk_62:

(Start: 42 @41281 has 138 MA's), (71, 41392), (78, 41428), (88, 41491), (106, 41641), (120, 41713), (125, 41767), (137, 41851), (143, 41908), (150, 41956), (163, 42022), (173, 42073), (174, 42082), (176, 42097), (182, 42139),

Gene: Jeckyll_61 Start: 41411, Stop: 42289, Start Num: 42

Candidate Starts for Jeckyll_61:

(Start: 42 @41411 has 138 MA's), (71, 41522), (88, 41621), (120, 41843), (125, 41897), (137, 41972), (143, 42029), (150, 42077), (163, 42143), (172, 42191), (174, 42203), (176, 42218),

Gene: Jflix2_69 Start: 43814, Stop: 44623, Start Num: 54

Candidate Starts for Jflix2_69:

(Start: 54 @43814 has 2 MA's), (66, 43853), (73, 43892), (85, 43976), (89, 43988), (95, 44051), (97, 44063), (98, 44075), (125, 44183), (146, 44324), (164, 44432), (176, 44507), (188, 44600),

Gene: Jojo24_38 Start: 27664, Stop: 28428, Start Num: 50

Candidate Starts for Jojo24_38:

(Start: 50 @27664 has 1 MA's), (70, 27733), (89, 27844), (96, 27916), (97, 27919), (127, 28075), (129, 28081), (137, 28117), (146, 28183), (164, 28291), (176, 28363),

Gene: Joy99_61 Start: 41340, Stop: 42218, Start Num: 42

Candidate Starts for Joy99_61:

(Start: 42 @41340 has 138 MA's), (71, 41451), (88, 41550), (120, 41772), (125, 41826), (137, 41901), (143, 41958), (150, 42006), (163, 42072), (172, 42120), (174, 42132), (176, 42147),

Gene: Judy_49 Start: 31513, Stop: 32319, Start Num: 44

Candidate Starts for Judy_49:

(Start: 44 @31513 has 10 MA's), (53, 31537), (60, 31561), (72, 31624), (75, 31636), (81, 31684), (107, 31849), (125, 31936), (140, 32044), (143, 32068), (144, 32071), (157, 32167), (169, 32215),

Gene: Juliette_66 Start: 41223, Stop: 42086, Start Num: 46

Candidate Starts for Juliette_66:

(33, 41187), (Start: 42 @41202 has 138 MA's), (Start: 46 @41223 has 21 MA's), (60, 41256), (65, 41277), (78, 41352), (119, 41631), (120, 41637), (126, 41700), (135, 41754), (143, 41823), (150, 41871), (164, 41940), (179, 42048), (180, 42051),

Gene: Karkharias_46 Start: 30610, Stop: 31416, Start Num: 44

Candidate Starts for Karkharias_46:

(33, 30586), (Start: 44 @30610 has 10 MA's), (49, 30619), (53, 30634), (72, 30721), (75, 30733), (81, 30781), (107, 30946), (140, 31141), (143, 31165), (144, 31168), (157, 31264),

Gene: KayMoney_46 Start: 30029, Stop: 30835, Start Num: 44

Candidate Starts for KayMoney_46:

(Start: 44 @30029 has 10 MA's), (53, 30053), (72, 30140), (75, 30152), (81, 30200), (107, 30365), (125, 30452), (140, 30560), (143, 30584), (144, 30587), (157, 30683), (169, 30731),

Gene: Keshu_62 Start: 41474, Stop: 42373, Start Num: 42

Candidate Starts for Keshu_62:

(Start: 42 @41474 has 138 MA's), (71, 41585), (88, 41684), (91, 41693), (98, 41771), (106, 41834), (110, 41846), (111, 41864), (119, 41921), (137, 42056), (143, 42113), (150, 42161), (164, 42230), (173, 42278), (176, 42302),

Gene: KiSi_65 Start: 42230, Stop: 43150, Start Num: 41

Candidate Starts for KiSi_65:

(Start: 41 @42230 has 5 MA's), (71, 42341), (89, 42443), (106, 42590), (119, 42656), (120, 42662), (125, 42716), (133, 42785), (148, 42899), (149, 42902), (150, 42917), (152, 42944), (164, 42986), (172, 43031), (176, 43058), (177, 43076),

Gene: Kratio_53 Start: 38274, Stop: 39134, Start Num: 40

Candidate Starts for Kratio_53:

(Start: 40 @38274 has 22 MA's), (71, 38388), (78, 38424), (106, 38637), (120, 38688), (121, 38700), (122, 38718), (125, 38742), (135, 38805), (136, 38808), (142, 38865), (149, 38907), (155, 38961), (165, 38994), (172, 39036), (174, 39048), (182, 39105), (187, 39126),

Gene: Krili_13 Start: 5076, Stop: 5825, Start Num: 57

Candidate Starts for Krili_13:

(Start: 57 @5076 has 27 MA's), (71, 5142), (84, 5220), (89, 5244), (95, 5304), (102, 5346), (116, 5382), (125, 5442), (143, 5571), (150, 5619), (155, 5658), (168, 5706),

Gene: Krueger_64 Start: 41010, Stop: 41909, Start Num: 42

Candidate Starts for Krueger_64:

(16, 40815), (28, 40971), (Start: 42 @41010 has 138 MA's), (62, 41070), (71, 41121), (84, 41199), (85, 41208), (89, 41223), (99, 41310), (111, 41382), (119, 41436), (137, 41592), (143, 41649), (171, 41805), (172, 41811), (176, 41838), (178, 41862),

Gene: Larva_56 Start: 39706, Stop: 40566, Start Num: 40

Candidate Starts for Larva_56:

(Start: 40 @39706 has 22 MA's), (71, 39820), (78, 39856), (89, 39922), (91, 39928), (106, 40069), (113, 40081), (120, 40120), (122, 40150), (125, 40174), (142, 40297), (165, 40426), (167, 40435), (172, 40468), (174, 40480), (182, 40537), (187, 40558),

Gene: LastHope_64 Start: 40454, Stop: 41341, Start Num: 42

Candidate Starts for LastHope_64:

(Start: 42 @40454 has 138 MA's), (71, 40565), (88, 40664), (106, 40814), (120, 40886), (125, 40940), (137, 41024), (143, 41081), (150, 41129), (163, 41195), (173, 41246), (176, 41270),

Gene: LaterM_61 Start: 41874, Stop: 42761, Start Num: 42

Candidate Starts for LaterM_61:

(Start: 42 @41874 has 138 MA's), (71, 41985), (88, 42084), (120, 42306), (125, 42360), (137, 42444), (143, 42501), (150, 42549), (163, 42615), (173, 42666), (174, 42675), (176, 42690),

Gene: LeMond_64 Start: 41861, Stop: 42784, Start Num: 41

Candidate Starts for LeMond_64:

(Start: 41 @41861 has 5 MA's), (71, 41972), (89, 42074), (106, 42221), (119, 42287), (120, 42293), (125, 42350), (133, 42419), (148, 42533), (149, 42536), (150, 42551), (152, 42578), (164, 42620), (176, 42692), (177, 42710),

Gene: Leston_55 Start: 40333, Stop: 41193, Start Num: 40

Candidate Starts for Leston_55:

(Start: 40 @40333 has 22 MA's), (71, 40447), (106, 40696), (113, 40708), (121, 40759), (122, 40777), (125, 40801), (136, 40867), (139, 40888), (142, 40924), (149, 40966), (155, 41020), (163, 41047), (165, 41053), (172, 41095), (174, 41107), (182, 41164), (187, 41185),

Gene: LilPharaoh_50 Start: 38323, Stop: 39210, Start Num: 42

Candidate Starts for LilPharaoh_50:

(Start: 42 @38323 has 138 MA's), (71, 38434), (88, 38533), (106, 38683), (115, 38716), (120, 38755), (125, 38809), (137, 38893), (142, 38941), (143, 38950), (147, 38965), (150, 38998), (172, 39112), (176, 39139),

Gene: LindNT_60 Start: 41483, Stop: 42361, Start Num: 42

Candidate Starts for LindNT_60:

(Start: 42 @41483 has 138 MA's), (71, 41594), (88, 41693), (120, 41915), (125, 41969), (137, 42044), (143, 42101), (150, 42149), (163, 42215), (172, 42263), (174, 42275), (176, 42290),

Gene: Llorens_61 Start: 41411, Stop: 42289, Start Num: 42

Candidate Starts for Llorens_61:

(Start: 42 @41411 has 138 MA's), (71, 41522), (88, 41621), (120, 41843), (125, 41897), (137, 41972), (143, 42029), (150, 42077), (163, 42143), (172, 42191), (174, 42203), (176, 42218),

Gene: Lunahalos_61 Start: 41411, Stop: 42289, Start Num: 42

Candidate Starts for Lunahalos_61:

(Start: 42 @41411 has 138 MA's), (71, 41522), (88, 41621), (120, 41843), (125, 41897), (137, 41972), (143, 42029), (150, 42077), (163, 42143), (172, 42191), (174, 42203), (176, 42218),

Gene: MacnCheese_62 Start: 41974, Stop: 42873, Start Num: 42

Candidate Starts for MacnCheese_62:

(Start: 42 @41974 has 138 MA's), (71, 42085), (88, 42184), (91, 42193), (98, 42271), (106, 42334), (110, 42346), (111, 42364), (119, 42421), (120, 42427), (137, 42556), (143, 42613), (150, 42661), (164, 42730), (176, 42802),

Gene: MadKillah_14 Start: 5097, Stop: 5846, Start Num: 57

Candidate Starts for MadKillah_14:

(Start: 57 @5097 has 27 MA's), (71, 5163), (84, 5241), (89, 5265), (95, 5325), (102, 5367), (116, 5403), (125, 5463), (143, 5592), (150, 5640), (155, 5679), (168, 5727),

Gene: Madraxi_73 Start: 46508, Stop: 47317, Start Num: 54

Candidate Starts for Madraxi_73:

(Start: 54 @46508 has 2 MA's), (66, 46547), (85, 46670), (89, 46682), (95, 46745), (97, 46757), (98, 46769), (125, 46877), (146, 47018), (164, 47126), (176, 47201), (188, 47294),

Gene: MalagasyRose_61 Start: 40415, Stop: 41278, Start Num: 39

Candidate Starts for MalagasyRose_61:

(Start: 39 @40415 has 1 MA's), (Start: 46 @40439 has 21 MA's), (68, 40508), (71, 40529), (79, 40571), (81, 40592), (86, 40619), (98, 40715), (114, 40793), (119, 40826), (120, 40832), (125, 40886), (139, 40973), (142, 41009), (150, 41066), (153, 41096), (154, 41099), (163, 41132), (171, 41174), (174, 41192), (176, 41207),

Gene: Malthus_65 Start: 40911, Stop: 41774, Start Num: 46

Candidate Starts for Malthus_65:

(33, 40875), (Start: 42 @40890 has 138 MA's), (Start: 46 @40911 has 21 MA's), (60, 40944), (65, 40965), (78, 41040), (119, 41319), (120, 41325), (126, 41388), (135, 41442), (143, 41511), (150, 41559), (164, 41628), (179, 41736), (180, 41739),

Gene: Marcoliusprime_62 Start: 43382, Stop: 44239, Start Num: 42

Candidate Starts for Marcoliusprime_62:

(Start: 42 @43382 has 138 MA's), (71, 43487), (88, 43586), (120, 43796), (150, 44030), (164, 44099), (173, 44147), (174, 44156), (176, 44171),

Gene: MarkPhew_63 Start: 41511, Stop: 42416, Start Num: 42

Candidate Starts for MarkPhew_63:

(Start: 42 @41511 has 138 MA's), (81, 41685), (85, 41709), (89, 41724), (106, 41871), (119, 41940), (120, 41946), (125, 42003), (133, 42072), (148, 42186), (149, 42189), (164, 42273), (176, 42345), (177, 42363),

Gene: Marshawn_60 Start: 41598, Stop: 42494, Start Num: 41

Candidate Starts for Marshawn_60:

(3, 41262), (19, 41436), (26, 41547), (Start: 41 @41598 has 5 MA's), (71, 41709), (85, 41796), (89, 41811), (106, 41958), (119, 42024), (120, 42030), (125, 42084), (133, 42153), (137, 42180), (143, 42237), (176, 42426), (177, 42444),

Gene: McMater_62 Start: 41510, Stop: 42397, Start Num: 42

Candidate Starts for McMater_62:

(Start: 42 @41510 has 138 MA's), (71, 41621), (88, 41720), (89, 41723), (106, 41870), (119, 41936), (120, 41942), (125, 41996), (137, 42080), (143, 42137), (150, 42185), (173, 42302), (174, 42311), (176, 42326), (178, 42350), (181, 42365),

Gene: Mdavu_51 Start: 38584, Stop: 39471, Start Num: 42

Candidate Starts for Mdavu_51:

(Start: 42 @38584 has 138 MA's), (71, 38695), (88, 38794), (106, 38944), (115, 38977), (120, 39016), (125, 39070), (137, 39154), (142, 39202), (143, 39211), (147, 39226), (150, 39259), (172, 39373), (176, 39400),

Gene: MeaningOfLife_62 Start: 42154, Stop: 43041, Start Num: 42

Candidate Starts for MeaningOfLife_62:

(Start: 42 @42154 has 138 MA's), (71, 42265), (88, 42364), (106, 42514), (120, 42586), (125, 42640), (137, 42724), (143, 42781), (149, 42814), (150, 42829), (163, 42895), (174, 42955), (176, 42970), (182, 43012),

Gene: Megsy_63 Start: 41551, Stop: 42438, Start Num: 42

Candidate Starts for Megsy_63:

(Start: 42 @41551 has 138 MA's), (71, 41662), (88, 41761), (120, 41983), (125, 42037), (137, 42121), (143, 42178), (150, 42226), (163, 42292), (173, 42343), (174, 42352), (176, 42367),

Gene: Milly_62 Start: 43355, Stop: 44212, Start Num: 42

Candidate Starts for Milly_62:

(Start: 42 @43355 has 138 MA's), (71, 43460), (88, 43559), (120, 43769), (150, 44003), (164, 44072), (173, 44120), (174, 44129), (176, 44144),

Gene: Miryou_59 Start: 42930, Stop: 43790, Start Num: 40

Candidate Starts for Miryou_59:

(Start: 40 @42930 has 22 MA's), (68, 43023), (71, 43044), (106, 43293), (113, 43305), (119, 43338), (120, 43344), (121, 43356), (122, 43374), (125, 43398), (136, 43464), (142, 43521), (149, 43563),

(155, 43617), (163, 43644), (165, 43650), (172, 43692), (174, 43704), (182, 43761), (187, 43782),

Gene: MissDaisy_61 Start: 39823, Stop: 40686, Start Num: 46

Candidate Starts for MissDaisy_61:

(21, 39658), (Start: 42 @39802 has 138 MA's), (Start: 46 @39823 has 21 MA's), (77, 39934), (78, 39952), (91, 40024), (92, 40054), (120, 40237), (125, 40291), (143, 40423), (179, 40648), (180, 40651),

Gene: Mitti_64 Start: 41090, Stop: 41953, Start Num: 46

Candidate Starts for Mitti_64:

(33, 41054), (Start: 42 @41069 has 138 MA's), (Start: 46 @41090 has 21 MA's), (60, 41123), (65, 41144), (78, 41219), (119, 41498), (120, 41504), (126, 41567), (135, 41621), (143, 41690), (150, 41738), (164, 41807), (179, 41915), (180, 41918),

Gene: Mori_13 Start: 4936, Stop: 5685, Start Num: 57

Candidate Starts for Mori_13:

(Start: 57 @4936 has 27 MA's), (71, 5002), (84, 5080), (89, 5104), (95, 5164), (102, 5206), (116, 5242), (125, 5302), (143, 5431), (150, 5479), (155, 5518), (168, 5566),

Gene: Mufasa_62 Start: 42945, Stop: 43802, Start Num: 42

Candidate Starts for Mufasa_62:

(Start: 42 @42945 has 138 MA's), (71, 43050), (88, 43149), (120, 43359), (150, 43593), (164, 43662), (173, 43710), (174, 43719), (176, 43734),

Gene: Mulch_47 Start: 33927, Stop: 34814, Start Num: 25

Candidate Starts for Mulch_47:

(13, 33774), (14, 33783), (19, 33822), (Start: 25 @33927 has 15 MA's), (27, 33948), (55, 34038), (64, 34065), (68, 34083), (128, 34437), (130, 34446), (131, 34452), (144, 34539), (145, 34542), (150, 34584), (152, 34611), (158, 34638), (160, 34644), (164, 34653), (166, 34662),

Gene: Murai_13 Start: 4936, Stop: 5685, Start Num: 57

Candidate Starts for Murai_13:

(Start: 57 @4936 has 27 MA's), (71, 5002), (84, 5080), (89, 5104), (95, 5164), (102, 5206), (116, 5242), (125, 5302), (143, 5431), (150, 5479), (155, 5518), (168, 5566),

Gene: Murucutumbu_62 Start: 42254, Stop: 43141, Start Num: 42

Candidate Starts for Murucutumbu_62:

(Start: 42 @42254 has 138 MA's), (71, 42365), (88, 42464), (120, 42686), (125, 42740), (137, 42824), (143, 42881), (150, 42929), (163, 42995), (173, 43046), (174, 43055), (176, 43070),

Gene: Mynx_62 Start: 41596, Stop: 42474, Start Num: 42

Candidate Starts for Mynx_62:

(Start: 42 @41596 has 138 MA's), (71, 41707), (88, 41806), (106, 41956), (120, 42028), (125, 42082), (137, 42157), (143, 42214), (150, 42262), (163, 42328), (172, 42376), (174, 42388), (176, 42403),

Gene: Nadeem_47 Start: 33927, Stop: 34814, Start Num: 25

Candidate Starts for Nadeem_47:

(13, 33774), (14, 33783), (19, 33822), (Start: 25 @33927 has 15 MA's), (27, 33948), (55, 34038), (64, 34065), (68, 34083), (128, 34437), (130, 34446), (131, 34452), (144, 34539), (145, 34542), (150, 34584), (152, 34611), (158, 34638), (160, 34644), (164, 34653), (166, 34662),

Gene: NancyRae_47 Start: 33937, Stop: 34824, Start Num: 25

Candidate Starts for NancyRae_47:

(13, 33784), (14, 33793), (19, 33832), (Start: 25 @33937 has 15 MA's), (27, 33958), (55, 34048), (64, 34075), (68, 34093), (80, 34162), (128, 34447), (130, 34456), (131, 34462), (144, 34549), (145, 34552), (150, 34594), (152, 34621), (158, 34648), (160, 34654), (164, 34663), (166, 34672),

Gene: Nergal_54 Start: 38056, Stop: 38922, Start Num: 37

Candidate Starts for Nergal_54:

(Start: 37 @38056 has 1 MA's), (71, 38167), (90, 38269), (114, 38437), (125, 38530), (149, 38695), (150, 38710),

Gene: Nibb_62 Start: 41203, Stop: 42108, Start Num: 42

Candidate Starts for Nibb_62:

(4, 40876), (Start: 42 @41203 has 138 MA's), (89, 41416), (106, 41563), (119, 41632), (120, 41638), (125, 41695), (133, 41764), (148, 41878), (149, 41881), (164, 41965), (172, 42010), (176, 42037), (177, 42055),

Gene: NiebruSaylor_13 Start: 4936, Stop: 5685, Start Num: 57

Candidate Starts for NiebruSaylor_13:

(Start: 57 @4936 has 27 MA's), (71, 5002), (84, 5080), (89, 5104), (95, 5164), (102, 5206), (116, 5242), (125, 5302), (143, 5431), (150, 5479), (155, 5518), (168, 5566),

Gene: Nikao_53 Start: 41208, Stop: 42095, Start Num: 42

Candidate Starts for Nikao_53:

(Start: 42 @41208 has 138 MA's), (71, 41319), (88, 41418), (106, 41568), (115, 41601), (120, 41640), (125, 41694), (137, 41778), (142, 41826), (143, 41835), (147, 41850), (150, 41883), (172, 41997), (176, 42024),

Gene: Niklas_62 Start: 41571, Stop: 42458, Start Num: 42

Candidate Starts for Niklas_62:

(Start: 42 @41571 has 138 MA's), (71, 41682), (88, 41781), (89, 41784), (106, 41931), (119, 41997), (120, 42003), (125, 42057), (137, 42141), (143, 42198), (150, 42246), (173, 42363), (174, 42372), (176, 42387), (178, 42411), (181, 42426),

Gene: Nutello_50 Start: 38595, Stop: 39482, Start Num: 42

Candidate Starts for Nutello_50:

(Start: 42 @38595 has 138 MA's), (71, 38706), (88, 38805), (106, 38955), (115, 38988), (120, 39027), (125, 39081), (137, 39165), (142, 39213), (143, 39222), (147, 39237), (150, 39270), (172, 39384), (176, 39411),

Gene: OkiRoe_56 Start: 40601, Stop: 41461, Start Num: 40

Candidate Starts for OkiRoe_56:

(Start: 40 @40601 has 22 MA's), (68, 40694), (71, 40715), (106, 40964), (113, 40976), (119, 41009), (120, 41015), (121, 41027), (122, 41045), (125, 41069), (136, 41135), (142, 41192), (149, 41234), (155, 41288), (163, 41315), (165, 41321), (172, 41363), (174, 41375), (182, 41432), (187, 41453),

Gene: OmniCritical_63 Start: 40980, Stop: 41843, Start Num: 46

Candidate Starts for OmniCritical_63:

(33, 40944), (Start: 42 @40959 has 138 MA's), (Start: 46 @40980 has 21 MA's), (60, 41013), (65, 41034), (78, 41109), (119, 41388), (120, 41394), (126, 41457), (135, 41511), (143, 41580), (150, 41628), (164, 41697), (179, 41805), (180, 41808),

Gene: Omnicron_59 Start: 40704, Stop: 41564, Start Num: 40

Candidate Starts for Omnicron_59:

(Start: 40 @40704 has 22 MA's), (69, 40800), (70, 40809), (71, 40818), (80, 40866), (91, 40926), (106, 41067), (113, 41079), (125, 41172), (136, 41238), (139, 41259), (142, 41295), (149, 41337), (152, 41379), (155, 41391), (162, 41415), (165, 41424), (174, 41478), (182, 41535), (187, 41556),

Gene: Oscar_64 Start: 41778, Stop: 42701, Start Num: 41

Candidate Starts for Oscar_64:

(35, 41772), (Start: 41 @41778 has 5 MA's), (71, 41889), (89, 41991), (106, 42138), (119, 42204), (120, 42210), (125, 42267), (133, 42336), (148, 42450), (149, 42453), (150, 42468), (152, 42495), (164, 42537), (176, 42609), (177, 42627),

Gene: Padfoot_61 Start: 41608, Stop: 42486, Start Num: 42

Candidate Starts for Padfoot_61:

(Start: 42 @41608 has 138 MA's), (71, 41719), (88, 41818), (120, 42040), (125, 42094), (137, 42169), (143, 42226), (150, 42274), (163, 42340), (172, 42388), (174, 42400), (176, 42415),

Gene: Padpat_63 Start: 41277, Stop: 42155, Start Num: 42

Candidate Starts for Padpat_63:

(Start: 42 @41277 has 138 MA's), (71, 41388), (88, 41487), (106, 41637), (120, 41709), (125, 41763), (137, 41838), (143, 41895), (150, 41943), (163, 42009), (172, 42057), (174, 42069), (176, 42084),

Gene: Paola_55 Start: 40204, Stop: 41064, Start Num: 40

Candidate Starts for Paola_55:

(Start: 40 @40204 has 22 MA's), (71, 40318), (106, 40567), (113, 40579), (121, 40630), (122, 40648), (125, 40672), (136, 40738), (139, 40759), (142, 40795), (149, 40837), (155, 40891), (163, 40918), (165, 40924), (172, 40966), (174, 40978), (182, 41035), (187, 41056),

Gene: Parada_47 Start: 33927, Stop: 34814, Start Num: 25

Candidate Starts for Parada_47:

(13, 33774), (14, 33783), (19, 33822), (Start: 25 @33927 has 15 MA's), (27, 33948), (55, 34038), (64, 34065), (68, 34083), (128, 34437), (130, 34446), (131, 34452), (144, 34539), (145, 34542), (150, 34584), (152, 34611), (158, 34638), (160, 34644), (164, 34653), (166, 34662),

Gene: Patt_60 Start: 39547, Stop: 40410, Start Num: 46

Candidate Starts for Patt_60:

(21, 39382), (Start: 42 @39526 has 138 MA's), (Start: 46 @39547 has 21 MA's), (77, 39658), (78, 39676), (91, 39748), (92, 39778), (120, 39961), (125, 40015), (143, 40147), (179, 40372), (180, 40375),

Gene: Peanam_62 Start: 41529, Stop: 42416, Start Num: 42

Candidate Starts for Peanam_62:

(Start: 42 @41529 has 138 MA's), (71, 41640), (88, 41739), (89, 41742), (106, 41889), (119, 41955), (120, 41961), (125, 42015), (137, 42099), (143, 42156), (150, 42204), (173, 42321), (174, 42330), (176, 42345), (178, 42369), (181, 42384),

Gene: Peas_45 Start: 31548, Stop: 32372, Start Num: 44

Candidate Starts for Peas_45:

(Start: 44 @31548 has 10 MA's), (72, 31659), (75, 31671), (81, 31719), (94, 31803), (143, 32103), (144, 32106), (152, 32178), (157, 32202), (169, 32250), (185, 32355),

Gene: Peel_61 Start: 41413, Stop: 42291, Start Num: 42

Candidate Starts for Peel_61:

(Start: 42 @41413 has 138 MA's), (71, 41524), (88, 41623), (120, 41845), (125, 41899), (137, 41974), (143, 42031), (150, 42079), (163, 42145), (172, 42193), (174, 42205), (176, 42220),

Gene: PeggyLeg03_46 Start: 30698, Stop: 31504, Start Num: 44

Candidate Starts for PeggyLeg03_46:

(Start: 44 @30698 has 10 MA's), (53, 30722), (60, 30746), (72, 30809), (75, 30821), (81, 30869), (107, 31034), (125, 31121), (140, 31229), (143, 31253), (144, 31256), (157, 31352), (169, 31400),

Gene: Pharb_59 Start: 40578, Stop: 41477, Start Num: 42

Candidate Starts for Pharb_59:

(Start: 42 @40578 has 138 MA's), (71, 40689), (88, 40788), (91, 40797), (100, 40881), (119, 41004), (120, 41010), (125, 41064), (134, 41142), (137, 41160), (148, 41247), (150, 41265), (156, 41307), (157, 41316), (164, 41334), (172, 41379), (173, 41382), (176, 41406), (177, 41424),

Gene: PhelpsODU_61 Start: 40671, Stop: 41570, Start Num: 42

Candidate Starts for PhelpsODU_61:

(28, 40632), (Start: 42 @40671 has 138 MA's), (62, 40731), (85, 40869), (89, 40884), (99, 40971), (120, 41103), (137, 41253), (143, 41310), (150, 41358), (152, 41385), (176, 41499), (178, 41523),

Gene: Phrank_63 Start: 40732, Stop: 41631, Start Num: 42

Candidate Starts for Phrank_63:

(7, 40402), (17, 40549), (19, 40555), (28, 40693), (Start: 42 @40732 has 138 MA's), (62, 40792), (71, 40843), (84, 40921), (85, 40930), (89, 40945), (99, 41032), (119, 41158), (120, 41164), (137, 41314), (143, 41371), (150, 41419), (152, 41446), (176, 41560), (178, 41584),

Gene: Piatt_61 Start: 41608, Stop: 42486, Start Num: 42

Candidate Starts for Piatt_61:

(Start: 42 @41608 has 138 MA's), (71, 41719), (88, 41818), (120, 42040), (125, 42094), (137, 42169), (143, 42226), (150, 42274), (163, 42340), (172, 42388), (174, 42400), (176, 42415),

Gene: Pimento_48 Start: 33578, Stop: 34405, Start Num: 25

Candidate Starts for Pimento_48:

(13, 33425), (14, 33434), (19, 33473), (Start: 25 @33578 has 15 MA's), (43, 33602), (64, 33656), (68, 33674), (80, 33743), (128, 34028), (130, 34037), (131, 34043), (144, 34130), (145, 34133), (152, 34202), (158, 34229), (160, 34235), (164, 34244), (166, 34253),

Gene: Pixie_59 Start: 40914, Stop: 41795, Start Num: 42

Candidate Starts for Pixie_59:

(Start: 42 @40914 has 138 MA's), (71, 41025), (81, 41088), (88, 41124), (91, 41133), (98, 41211), (119, 41343), (137, 41478), (143, 41535), (150, 41583), (164, 41652), (172, 41697), (173, 41700), (176, 41724),

Gene: Pokerus_60 Start: 41329, Stop: 42207, Start Num: 42

Candidate Starts for Pokerus_60:

(Start: 42 @41329 has 138 MA's), (69, 41422), (71, 41440), (88, 41539), (106, 41689), (120, 41761), (137, 41890), (143, 41947), (150, 41995), (163, 42061), (172, 42109), (174, 42121), (176, 42136),

Gene: Prithvi_62 Start: 41483, Stop: 42361, Start Num: 42

Candidate Starts for Prithvi_62:

(Start: 42 @41483 has 138 MA's), (71, 41594), (88, 41693), (120, 41915), (125, 41969), (137, 42044), (143, 42101), (150, 42149), (163, 42215), (172, 42263), (174, 42275), (176, 42290),

Gene: Psycho_55 Start: 38831, Stop: 39691, Start Num: 40

Candidate Starts for Psycho_55:

(Start: 40 @38831 has 22 MA's), (71, 38945), (78, 38981), (89, 39047), (106, 39194), (113, 39206), (120, 39245), (122, 39275), (125, 39299), (142, 39422), (165, 39551), (167, 39560), (172, 39593), (174, 39605), (182, 39662), (187, 39683),

Gene: Pucara_43 Start: 30303, Stop: 31109, Start Num: 44

Candidate Starts for Pucara_43:

(Start: 44 @30303 has 10 MA's), (53, 30327), (60, 30351), (72, 30414), (75, 30426), (81, 30474), (107, 30639), (125, 30726), (140, 30834), (143, 30858), (144, 30861), (157, 30957), (169, 31005),

Gene: QuincyRose_60 Start: 41672, Stop: 42550, Start Num: 42

Candidate Starts for QuincyRose_60:

(Start: 42 @41672 has 138 MA's), (71, 41783), (88, 41882), (106, 42032), (120, 42104), (125, 42158), (137, 42233), (143, 42290), (150, 42338), (163, 42404), (172, 42452), (174, 42464), (176, 42479),

Gene: REQ1_38 Start: 15432, Stop: 16226, Start Num: 54

Candidate Starts for REQ1_38:

(Start: 54 @15432 has 2 MA's), (66, 15471), (82, 15576), (83, 15579), (85, 15594), (89, 15606), (95, 15669), (97, 15681), (98, 15693), (125, 15801), (138, 15882), (146, 15942), (176, 16125),

Gene: Ramen_62 Start: 41288, Stop: 42175, Start Num: 42

Candidate Starts for Ramen_62:

(Start: 42 @41288 has 138 MA's), (71, 41399), (88, 41498), (106, 41648), (120, 41720), (125, 41774), (137, 41858), (143, 41915), (150, 41963), (163, 42029), (174, 42089), (176, 42104), (182, 42146),

Gene: Rando14_57 Start: 38404, Stop: 39264, Start Num: 40

Candidate Starts for Rando14_57:

(Start: 40 @38404 has 22 MA's), (69, 38500), (70, 38509), (72, 38521), (78, 38554), (81, 38581), (91, 38626), (92, 38656), (100, 38710), (106, 38767), (113, 38779), (119, 38812), (120, 38818), (125, 38872), (126, 38881), (136, 38938), (142, 38995), (152, 39079), (155, 39091), (162, 39115), (165, 39124), (174, 39178), (182, 39235), (187, 39256),

Gene: Rapunzel97_62 Start: 41275, Stop: 42162, Start Num: 42

Candidate Starts for Rapunzel97_62:

(Start: 42 @41275 has 138 MA's), (69, 41368), (71, 41386), (88, 41485), (106, 41635), (120, 41707), (125, 41761), (137, 41845), (143, 41902), (150, 41950), (163, 42016), (174, 42076), (176, 42091), (182, 42133),

Gene: Reptar3000_61 Start: 39535, Stop: 40398, Start Num: 46

Candidate Starts for Reptar3000_61:

(21, 39370), (Start: 42 @39514 has 138 MA's), (Start: 46 @39535 has 21 MA's), (77, 39646), (78, 39664), (91, 39736), (92, 39766), (120, 39949), (125, 40003), (143, 40135), (179, 40360), (180, 40363),

Gene: Reyja_39 Start: 28104, Stop: 28865, Start Num: 51

Candidate Starts for Reyja_39:

(Start: 51 @28104 has 4 MA's), (70, 28170), (89, 28281), (97, 28356), (98, 28368), (127, 28512), (140, 28587), (143, 28611), (146, 28620), (154, 28692), (157, 28710), (164, 28728), (176, 28800),

Gene: Richo_62 Start: 41510, Stop: 42397, Start Num: 42

Candidate Starts for Richo_62:

(Start: 42 @41510 has 138 MA's), (71, 41621), (88, 41720), (89, 41723), (106, 41870), (119, 41936), (120, 41942), (125, 41996), (137, 42080), (143, 42137), (150, 42185), (173, 42302), (174, 42311), (176, 42326), (178, 42350), (181, 42365),

Gene: RootBeer_37 Start: 26799, Stop: 27602, Start Num: 44

Candidate Starts for RootBeer_37:

(Start: 44 @26799 has 10 MA's), (53, 26823), (72, 26910), (75, 26922), (76, 26925), (81, 26970), (107, 27135), (125, 27222), (143, 27354), (144, 27357), (157, 27453),

Gene: Rosmarinus_61 Start: 41399, Stop: 42277, Start Num: 42

Candidate Starts for Rosmarinus_61:

(Start: 42 @41399 has 138 MA's), (71, 41510), (88, 41609), (120, 41831), (125, 41885), (137, 41960), (143, 42017), (150, 42065), (163, 42131), (172, 42179), (174, 42191), (176, 42206),

Gene: Ruthiejr_65 Start: 40961, Stop: 41824, Start Num: 46

Candidate Starts for Ruthiejr_65:

(33, 40925), (Start: 42 @40940 has 138 MA's), (Start: 46 @40961 has 21 MA's), (60, 40994), (65, 41015), (78, 41090), (119, 41369), (120, 41375), (126, 41438), (135, 41492), (143, 41561), (150, 41609), (164, 41678), (179, 41786), (180, 41789),

Gene: Ryadel_15 Start: 5530, Stop: 6279, Start Num: 57

Candidate Starts for Ryadel_15:

(Start: 57 @5530 has 27 MA's), (71, 5596), (84, 5674), (89, 5698), (95, 5758), (102, 5800), (116, 5836), (125, 5896), (143, 6025), (150, 6073), (155, 6112), (168, 6160),

Gene: SamScheppers_62 Start: 41390, Stop: 42253, Start Num: 46

Candidate Starts for SamScheppers_62:

(33, 41354), (Start: 42 @41369 has 138 MA's), (Start: 46 @41390 has 21 MA's), (60, 41423), (65, 41444), (78, 41519), (119, 41798), (120, 41804), (126, 41867), (135, 41921), (143, 41990), (150, 42038), (164, 42107), (179, 42215), (180, 42218),

Gene: SamuelLPlaqson_62 Start: 42174, Stop: 43055, Start Num: 42

Candidate Starts for SamuelLPlaqson_62:

(Start: 42 @42174 has 138 MA's), (71, 42285), (88, 42384), (120, 42609), (125, 42663), (137, 42738), (143, 42795), (150, 42843), (163, 42909), (172, 42957), (174, 42969), (176, 42984),

Gene: Santhid_38 Start: 26389, Stop: 27150, Start Num: 51

Candidate Starts for Santhid_38:

(30, 26332), (48, 26380), (Start: 51 @26389 has 4 MA's), (89, 26566), (96, 26638), (97, 26641), (127, 26797), (129, 26803), (137, 26839), (146, 26905), (164, 27013), (176, 27085),

Gene: Scarlett_65 Start: 42108, Stop: 43028, Start Num: 41

Candidate Starts for Scarlett_65:

(Start: 41 @42108 has 5 MA's), (71, 42219), (89, 42321), (106, 42468), (119, 42534), (120, 42540), (125, 42594), (133, 42663), (148, 42777), (149, 42780), (150, 42795), (152, 42822), (164, 42864), (172, 42909), (176, 42936), (177, 42954),

Gene: SchoolBus_12 Start: 4748, Stop: 5497, Start Num: 57

Candidate Starts for SchoolBus_12:

(Start: 57 @4748 has 27 MA's), (71, 4814), (84, 4892), (89, 4916), (95, 4976), (102, 5018), (116, 5054), (125, 5114), (143, 5243), (150, 5291), (155, 5330), (168, 5378),

Gene: Schuy_14 Start: 5097, Stop: 5846, Start Num: 57

Candidate Starts for Schuy_14:

(Start: 57 @5097 has 27 MA's), (71, 5163), (84, 5241), (89, 5265), (95, 5325), (102, 5367), (116, 5403), (125, 5463), (143, 5592), (150, 5640), (155, 5679), (168, 5727),

Gene: SgtBeansprout_50 Start: 38595, Stop: 39482, Start Num: 42

Candidate Starts for SgtBeansprout_50:

(Start: 42 @38595 has 138 MA's), (71, 38706), (88, 38805), (106, 38955), (115, 38988), (120, 39027), (125, 39081), (137, 39165), (142, 39213), (143, 39222), (147, 39237), (150, 39270), (172, 39384), (176, 39411),

Gene: Shadow1_64 Start: 41184, Stop: 42083, Start Num: 42

Candidate Starts for Shadow1_64:

(Start: 42 @41184 has 138 MA's), (62, 41244), (71, 41295), (84, 41373), (85, 41382), (89, 41397), (99, 41484), (111, 41556), (119, 41610), (120, 41616), (137, 41766), (143, 41823), (171, 41979), (176, 42012), (178, 42036),

Gene: Shagrat_70 Start: 42104, Stop: 42943, Start Num: 58

Candidate Starts for Shagrat_70:

(Start: 39 @42035 has 1 MA's), (Start: 58 @42104 has 1 MA's), (66, 42131), (89, 42269), (97, 42344), (104, 42386), (117, 42410), (118, 42413), (136, 42539), (141, 42593), (151, 42662), (164, 42725), (189, 42920),

Gene: Shambre1_40 Start: 26325, Stop: 27116, Start Num: 52

Candidate Starts for Shambre1_40:

(Start: 52 @26325 has 1 MA's), (61, 26355), (72, 26412), (74, 26415), (82, 26478), (95, 26568), (109, 26640), (142, 26844), (144, 26856),

Gene: Shaobing_62 Start: 41547, Stop: 42434, Start Num: 42

Candidate Starts for Shaobing_62:

(Start: 42 @41547 has 138 MA's), (71, 41658), (88, 41757), (89, 41760), (106, 41907), (119, 41973), (120, 41979), (125, 42033), (137, 42117), (143, 42174), (150, 42222), (173, 42339), (174, 42348), (176, 42363), (178, 42387), (181, 42402),

Gene: ShedlockHolmes_61 Start: 41433, Stop: 42314, Start Num: 42

Candidate Starts for ShedlockHolmes_61:

(Start: 42 @41433 has 138 MA's), (71, 41544), (81, 41607), (88, 41643), (91, 41652), (98, 41730), (103, 41766), (119, 41862), (137, 41997), (143, 42054), (150, 42102), (164, 42171), (172, 42216), (173, 42219), (176, 42243),

Gene: ShiaSurprise_62 Start: 41608, Stop: 42486, Start Num: 42

Candidate Starts for ShiaSurprise_62:

(Start: 42 @41608 has 138 MA's), (71, 41719), (88, 41818), (120, 42040), (125, 42094), (137, 42169), (143, 42226), (150, 42274), (163, 42340), (172, 42388), (174, 42400), (176, 42415),

Gene: Shida_13 Start: 5002, Stop: 5751, Start Num: 57

Candidate Starts for Shida_13:

(Start: 57 @5002 has 27 MA's), (71, 5068), (84, 5146), (89, 5170), (95, 5230), (102, 5272), (116, 5308), (125, 5368), (143, 5497), (150, 5545), (155, 5584), (168, 5632),

Gene: SirPhilip_61 Start: 41827, Stop: 42729, Start Num: 42

Candidate Starts for SirPhilip_61:

(Start: 42 @41827 has 138 MA's), (71, 41938), (89, 42040), (99, 42127), (106, 42187), (119, 42253), (120, 42259), (133, 42382), (137, 42409), (143, 42466), (152, 42541), (164, 42583), (173, 42631), (176, 42655),

Gene: Slarp_64 Start: 40918, Stop: 41781, Start Num: 46

Candidate Starts for Slarp_64:

(33, 40882), (Start: 42 @40897 has 138 MA's), (Start: 46 @40918 has 21 MA's), (60, 40951), (65, 40972), (78, 41047), (119, 41326), (120, 41332), (126, 41395), (135, 41449), (143, 41518), (150, 41566), (164, 41635), (179, 41743), (180, 41746),

Gene: Slimphazie_61 Start: 41275, Stop: 42162, Start Num: 42

Candidate Starts for Slimphazie_61:

(Start: 42 @41275 has 138 MA's), (69, 41368), (71, 41386), (88, 41485), (106, 41635), (120, 41707), (125, 41761), (137, 41845), (143, 41902), (150, 41950), (163, 42016), (174, 42076), (176, 42091), (182, 42133),

Gene: Smooch_14 Start: 5266, Stop: 6015, Start Num: 57

Candidate Starts for Smooch_14:

(Start: 57 @5266 has 27 MA's), (71, 5332), (84, 5410), (89, 5434), (95, 5494), (102, 5536), (116, 5572), (125, 5632), (143, 5761), (150, 5809), (168, 5896),

Gene: SoSeph_56 Start: 40576, Stop: 41436, Start Num: 40

Candidate Starts for SoSeph_56:

(Start: 40 @40576 has 22 MA's), (68, 40669), (71, 40690), (106, 40939), (113, 40951), (119, 40984), (120, 40990), (121, 41002), (122, 41020), (125, 41044), (136, 41110), (142, 41167), (149, 41209), (155, 41263), (163, 41290), (165, 41296), (172, 41338), (174, 41350), (182, 41407), (187, 41428),

Gene: Spock_61 Start: 41412, Stop: 42290, Start Num: 42

Candidate Starts for Spock_61:

(Start: 42 @41412 has 138 MA's), (71, 41523), (88, 41622), (120, 41844), (125, 41898), (137, 41973), (143, 42030), (150, 42078), (163, 42144), (172, 42192), (174, 42204), (176, 42219),

Gene: Stinson_62 Start: 41777, Stop: 42655, Start Num: 42

Candidate Starts for Stinson_62:

(Start: 42 @41777 has 138 MA's), (68, 41867), (71, 41888), (88, 41987), (120, 42209), (125, 42263), (137, 42338), (143, 42395), (150, 42443), (163, 42509), (172, 42557), (174, 42569), (176, 42584),

Gene: Strobilo_63 Start: 43357, Stop: 44214, Start Num: 42

Candidate Starts for Strobilo_63:

(Start: 42 @43357 has 138 MA's), (71, 43462), (88, 43561), (120, 43771), (150, 44005), (164, 44074), (173, 44122), (174, 44131), (176, 44146),

Gene: Sulley_61 Start: 41463, Stop: 42350, Start Num: 42

Candidate Starts for Sulley_61:

(Start: 42 @41463 has 138 MA's), (71, 41574), (88, 41673), (120, 41895), (125, 41949), (137, 42033), (143, 42090), (150, 42138), (163, 42204), (173, 42255), (174, 42264), (176, 42279),

Gene: Sunflower1121_65 Start: 41330, Stop: 42229, Start Num: 42

Candidate Starts for Sunflower1121_65:

(Start: 42 @41330 has 138 MA's), (62, 41390), (71, 41441), (84, 41519), (85, 41528), (89, 41543), (99, 41630), (111, 41702), (119, 41756), (120, 41762), (137, 41912), (143, 41969), (171, 42125), (176, 42158), (178, 42182),

Gene: Syra333_63 Start: 41022, Stop: 41921, Start Num: 42

Candidate Starts for Syra333_63:

(16, 40827), (28, 40983), (Start: 42 @41022 has 138 MA's), (62, 41082), (71, 41133), (84, 41211), (85, 41220), (89, 41235), (99, 41322), (111, 41394), (119, 41448), (137, 41604), (143, 41661), (176, 41850), (178, 41874),

Gene: TBond007_58 Start: 40913, Stop: 41794, Start Num: 42

Candidate Starts for TBond007_58:

(Start: 42 @40913 has 138 MA's), (71, 41024), (81, 41087), (88, 41123), (91, 41132), (98, 41210), (119, 41342), (137, 41477), (143, 41534), (150, 41582), (164, 41651), (172, 41696), (173, 41699), (176, 41723),

Gene: TClif_61 Start: 40980, Stop: 41876, Start Num: 42

Candidate Starts for TClif_61:

(Start: 42 @40980 has 138 MA's), (71, 41091), (89, 41193), (99, 41280), (106, 41340), (119, 41424), (120, 41430), (137, 41559), (143, 41616), (176, 41805),

Gene: TM4_59 Start: 37712, Stop: 38569, Start Num: 42

Candidate Starts for TM4_59:

(5, 37370), (Start: 42 @37712 has 138 MA's), (71, 37817), (88, 37916), (120, 38126), (150, 38360), (164, 38429), (173, 38477), (176, 38501),

Gene: TPA4_47 Start: 36087, Stop: 36890, Start Num: 47

Candidate Starts for TPA4_47:

(47, 36087), (86, 36249), (97, 36333), (101, 36360), (128, 36516), (130, 36525), (142, 36606), (143, 36615), (163, 36729), (170, 36768), (184, 36873),

Gene: Tachez_61 Start: 41256, Stop: 42134, Start Num: 42

Candidate Starts for Tachez_61:

(Start: 42 @41256 has 138 MA's), (71, 41367), (88, 41466), (120, 41688), (125, 41742), (137, 41817), (143, 41874), (150, 41922), (163, 41988), (172, 42036), (174, 42048), (176, 42063),

Gene: TaiwanKao_63 Start: 41545, Stop: 42423, Start Num: 42

Candidate Starts for TaiwanKao_63:

(Start: 42 @41545 has 138 MA's), (71, 41656), (88, 41755), (120, 41977), (125, 42031), (137, 42106), (143, 42163), (150, 42211), (163, 42277), (164, 42280), (172, 42325), (174, 42337), (176, 42352),

Gene: Taquito_63 Start: 41153, Stop: 42016, Start Num: 46

Candidate Starts for Taquito_63:

(33, 41117), (Start: 42 @41132 has 138 MA's), (Start: 46 @41153 has 21 MA's), (60, 41186), (65, 41207), (78, 41282), (119, 41561), (120, 41567), (126, 41630), (135, 41684), (143, 41753), (150, 41801), (164, 41870), (179, 41978), (180, 41981),

Gene: Tarzan_39 Start: 27538, Stop: 28299, Start Num: 51

Candidate Starts for Tarzan_39:

(15, 27307), (23, 27388), (32, 27487), (Start: 51 @27538 has 4 MA's), (70, 27604), (89, 27715), (97, 27790), (98, 27802), (127, 27946), (140, 28021), (143, 28045), (146, 28054), (157, 28144), (164, 28162), (176, 28234),

Gene: TelAviv_12 Start: 4745, Stop: 5494, Start Num: 57

Candidate Starts for TelAviv_12:

(Start: 57 @4745 has 27 MA's), (71, 4811), (84, 4889), (89, 4913), (95, 4973), (102, 5015), (116, 5051), (125, 5111), (143, 5240), (150, 5288), (155, 5327), (168, 5375),

Gene: Thyatira_58 Start: 42534, Stop: 43394, Start Num: 40

Candidate Starts for Thyatira_58:

(Start: 40 @42534 has 22 MA's), (68, 42627), (71, 42648), (106, 42897), (113, 42909), (120, 42948), (121, 42960), (122, 42978), (125, 43002), (136, 43068), (139, 43089), (142, 43125), (149, 43167),

(155, 43221), (163, 43248), (165, 43254), (172, 43296), (174, 43308), (182, 43365), (187, 43386),

Gene: Tierra_63 Start: 41543, Stop: 42442, Start Num: 42

Candidate Starts for Tierra_63:

(7, 41213), (17, 41360), (19, 41366), (28, 41504), (Start: 42 @41543 has 138 MA's), (62, 41603), (71, 41654), (84, 41732), (85, 41741), (89, 41756), (99, 41843), (119, 41969), (120, 41975), (137, 42125), (143, 42182), (150, 42230), (152, 42257), (176, 42371), (178, 42395),

Gene: TingHuaYa_63 Start: 40622, Stop: 41509, Start Num: 42

Candidate Starts for TingHuaYa_63:

(Start: 42 @40622 has 138 MA's), (71, 40733), (88, 40832), (106, 40982), (120, 41054), (125, 41108), (137, 41192), (143, 41249), (150, 41297), (163, 41363), (173, 41414), (174, 41423), (176, 41438),

Gene: TiniBug_62 Start: 42170, Stop: 43051, Start Num: 42

Candidate Starts for TiniBug_62:

(Start: 42 @42170 has 138 MA's), (71, 42281), (88, 42380), (120, 42605), (125, 42659), (137, 42734), (143, 42791), (150, 42839), (163, 42905), (172, 42953), (174, 42965), (176, 42980),

Gene: TinyDot_44 Start: 29888, Stop: 30616, Start Num: 59

Candidate Starts for TinyDot_44:

(6, 29531), (24, 29756), (Start: 59 @29888 has 1 MA's), (88, 30035), (121, 30194), (123, 30230), (127, 30269), (159, 30473),

Gene: Tiri_62 Start: 41574, Stop: 42461, Start Num: 42

Candidate Starts for Tiri_62:

(Start: 42 @41574 has 138 MA's), (71, 41685), (88, 41784), (106, 41934), (120, 42006), (125, 42060), (137, 42144), (143, 42201), (149, 42234), (150, 42249), (163, 42315), (174, 42375), (176, 42390),

Gene: Topper_61 Start: 41411, Stop: 42289, Start Num: 42

Candidate Starts for Topper_61:

(Start: 42 @41411 has 138 MA's), (71, 41522), (88, 41621), (120, 41843), (125, 41897), (137, 41972), (143, 42029), (150, 42077), (163, 42143), (172, 42191), (174, 42203), (176, 42218),

Gene: Torres_52 Start: 41209, Stop: 42096, Start Num: 42

Candidate Starts for Torres_52:

(Start: 42 @41209 has 138 MA's), (71, 41320), (88, 41419), (106, 41569), (115, 41602), (120, 41641), (125, 41695), (137, 41779), (142, 41827), (143, 41836), (147, 41851), (150, 41884), (172, 41998), (176, 42025),

Gene: TreyKay_62 Start: 41483, Stop: 42361, Start Num: 42

Candidate Starts for TreyKay_62:

(Start: 42 @41483 has 138 MA's), (71, 41594), (88, 41693), (120, 41915), (125, 41969), (137, 42044), (143, 42101), (150, 42149), (163, 42215), (172, 42263), (174, 42275), (176, 42290),

Gene: TribbleTrouble_60 Start: 41741, Stop: 42643, Start Num: 42

Candidate Starts for TribbleTrouble_60:

(31, 41720), (Start: 42 @41741 has 138 MA's), (71, 41852), (88, 41951), (91, 41960), (98, 42038), (106, 42101), (119, 42191), (137, 42326), (143, 42383), (150, 42431), (164, 42500), (165, 42503), (173, 42548), (176, 42572),

Gene: TruffulaTree_61 Start: 41271, Stop: 42158, Start Num: 42

Candidate Starts for TruffulaTree_61:

(Start: 42 @41271 has 138 MA's), (69, 41364), (71, 41382), (88, 41481), (106, 41631), (120, 41703), (125, 41757), (137, 41841), (143, 41898), (150, 41946), (163, 42012), (174, 42072), (176, 42087), (182, 42129),

Gene: Twitch_61 Start: 41413, Stop: 42291, Start Num: 42

Candidate Starts for Twitch_61:

(Start: 42 @41413 has 138 MA's), (71, 41524), (88, 41623), (120, 41845), (125, 41899), (137, 41974), (143, 42031), (150, 42079), (163, 42145), (172, 42193), (174, 42205), (176, 42220),

Gene: Unicorn_61 Start: 40671, Stop: 41570, Start Num: 42

Candidate Starts for Unicorn_61:

(28, 40632), (Start: 42 @40671 has 138 MA's), (62, 40731), (85, 40869), (89, 40884), (99, 40971), (120, 41103), (137, 41253), (143, 41310), (150, 41358), (152, 41385), (176, 41499), (178, 41523),

Gene: Urkel_62 Start: 42174, Stop: 43055, Start Num: 42

Candidate Starts for Urkel_62:

(Start: 42 @42174 has 138 MA's), (71, 42285), (88, 42384), (120, 42609), (125, 42663), (137, 42738), (143, 42795), (150, 42843), (163, 42909), (172, 42957), (174, 42969), (176, 42984),

Gene: Vagabond_13 Start: 5002, Stop: 5751, Start Num: 57

Candidate Starts for Vagabond_13:

(Start: 57 @5002 has 27 MA's), (71, 5068), (84, 5146), (89, 5170), (95, 5230), (102, 5272), (116, 5308), (125, 5368), (143, 5497), (150, 5545), (155, 5584), (168, 5632),

Gene: Validus_64 Start: 41893, Stop: 42780, Start Num: 42

Candidate Starts for Validus_64:

(Start: 42 @41893 has 138 MA's), (71, 42004), (89, 42106), (106, 42253), (110, 42265), (120, 42325), (125, 42379), (137, 42463), (143, 42520), (150, 42568), (162, 42631), (173, 42685), (174, 42694), (176, 42709), (178, 42733), (181, 42748),

Gene: Veliki_62 Start: 41251, Stop: 42129, Start Num: 42

Candidate Starts for Veliki_62:

(Start: 42 @41251 has 138 MA's), (71, 41362), (88, 41461), (106, 41611), (120, 41683), (125, 41737), (137, 41812), (143, 41869), (150, 41917), (163, 41983), (172, 42031), (174, 42043), (176, 42058),

Gene: Vorrps_13 Start: 4936, Stop: 5685, Start Num: 57

Candidate Starts for Vorrps_13:

(Start: 57 @4936 has 27 MA's), (71, 5002), (84, 5080), (89, 5104), (95, 5164), (102, 5206), (116, 5242), (125, 5302), (143, 5431), (150, 5479), (155, 5518), (168, 5566),

Gene: Waterfoul_57 Start: 40638, Stop: 41498, Start Num: 40

Candidate Starts for Waterfoul_57:

(Start: 40 @40638 has 22 MA's), (68, 40731), (71, 40752), (106, 41001), (113, 41013), (119, 41046), (120, 41052), (121, 41064), (122, 41082), (125, 41106), (136, 41172), (142, 41229), (149, 41271), (155, 41325), (163, 41352), (165, 41358), (172, 41400), (174, 41412), (182, 41469), (187, 41490),

Gene: WheatThin_47 Start: 33927, Stop: 34814, Start Num: 25

Candidate Starts for WheatThin_47:

(13, 33774), (14, 33783), (19, 33822), (Start: 25 @33927 has 15 MA's), (27, 33948), (55, 34038), (64, 34065), (68, 34083), (128, 34437), (130, 34446), (131, 34452), (144, 34539), (145, 34542), (150, 34584), (152, 34611), (158, 34638), (160, 34644), (164, 34653), (166, 34662),

Gene: Wildflower_13 Start: 4962, Stop: 5711, Start Num: 57

Candidate Starts for Wildflower_13:

(Start: 57 @4962 has 27 MA's), (71, 5028), (84, 5106), (89, 5130), (95, 5190), (102, 5232), (105, 5253), (116, 5268), (125, 5328), (143, 5457), (150, 5505), (155, 5544), (168, 5592),

Gene: Winget_13 Start: 5001, Stop: 5750, Start Num: 57

Candidate Starts for Winget_13:

(Start: 57 @5001 has 27 MA's), (71, 5067), (84, 5145), (89, 5169), (95, 5229), (102, 5271), (116, 5307), (125, 5367), (143, 5496), (150, 5544), (155, 5583),

Gene: Wintermute_64 Start: 41148, Stop: 42011, Start Num: 46

Candidate Starts for Wintermute_64:

(33, 41112), (Start: 42 @41127 has 138 MA's), (Start: 46 @41148 has 21 MA's), (60, 41181), (65, 41202), (78, 41277), (119, 41556), (120, 41562), (126, 41625), (135, 41679), (143, 41748), (150, 41796), (164, 41865), (179, 41973), (180, 41976),

Gene: Ximenita_65 Start: 41348, Stop: 42247, Start Num: 42

Candidate Starts for Ximenita_65:

(Start: 42 @41348 has 138 MA's), (62, 41408), (71, 41459), (84, 41537), (85, 41546), (89, 41561), (92, 41597), (99, 41648), (111, 41720), (119, 41774), (137, 41930), (143, 41987), (171, 42143), (176, 42176), (178, 42200),

Gene: Y10_62 Start: 41076, Stop: 41939, Start Num: 46

Candidate Starts for Y10_62:

(33, 41040), (Start: 42 @41055 has 138 MA's), (Start: 46 @41076 has 21 MA's), (60, 41109), (65, 41130), (67, 41145), (78, 41205), (119, 41484), (120, 41490), (135, 41607), (143, 41676), (150, 41724), (164, 41793), (179, 41901), (180, 41904),

Gene: Y2_62 Start: 41076, Stop: 41939, Start Num: 46

Candidate Starts for Y2_62:

(33, 41040), (Start: 42 @41055 has 138 MA's), (Start: 46 @41076 has 21 MA's), (60, 41109), (65, 41130), (67, 41145), (78, 41205), (119, 41484), (120, 41490), (135, 41607), (143, 41676), (150, 41724), (164, 41793), (179, 41901), (180, 41904),

Gene: YoureAdopted_60 Start: 41400, Stop: 42278, Start Num: 42

Candidate Starts for YoureAdopted_60:

(Start: 42 @41400 has 138 MA's), (71, 41511), (88, 41610), (106, 41760), (120, 41832), (125, 41886), (137, 41961), (143, 42018), (150, 42066), (163, 42132), (172, 42180), (174, 42192), (176, 42207),

Gene: Yuna_65 Start: 42443, Stop: 43345, Start Num: 42

Candidate Starts for Yuna_65:

(10, 42131), (Start: 42 @42443 has 138 MA's), (71, 42554), (84, 42632), (85, 42641), (89, 42656), (106, 42803), (119, 42872), (120, 42878), (132, 42998), (137, 43028), (149, 43118), (152, 43160), (176, 43274),

Gene: YungJamal_14 Start: 5302, Stop: 6051, Start Num: 57

Candidate Starts for YungJamal_14:

(Start: 57 @5302 has 27 MA's), (71, 5368), (84, 5446), (89, 5470), (95, 5530), (102, 5572), (116, 5608), (125, 5668), (143, 5797), (150, 5845), (155, 5884), (168, 5932),

Gene: Yunkel11_64 Start: 41120, Stop: 42025, Start Num: 42

Candidate Starts for Yunkel11_64:

(Start: 42 @41120 has 138 MA's), (71, 41231), (88, 41330), (120, 41570), (125, 41624), (137, 41708), (150, 41813), (163, 41879), (173, 41930), (174, 41939), (176, 41954),

Gene: Zabiza_56 Start: 37591, Stop: 38478, Start Num: 42

Candidate Starts for Zabiza_56:

(Start: 42 @37591 has 138 MA's), (71, 37702), (88, 37801), (106, 37951), (120, 38023), (125, 38077), (137, 38161), (143, 38218), (150, 38266), (163, 38332), (174, 38392), (176, 38407), (182, 38449),

Gene: Zakhe101_14 Start: 5314, Stop: 6063, Start Num: 57

Candidate Starts for Zakhe101_14:

(Start: 57 @5314 has 27 MA's), (71, 5380), (84, 5458), (89, 5482), (95, 5542), (102, 5584), (105, 5605), (116, 5620), (125, 5680), (143, 5809), (150, 5857), (155, 5896), (168, 5944),

Gene: Zavala_63 Start: 41556, Stop: 42434, Start Num: 42

Candidate Starts for Zavala_63:

(Start: 42 @41556 has 138 MA's), (71, 41667), (78, 41703), (88, 41766), (106, 41916), (120, 41988), (125, 42042), (137, 42117), (143, 42174), (150, 42222), (163, 42288), (172, 42336), (174, 42348), (176, 42363),

Gene: ZoeJ_61 Start: 42753, Stop: 43610, Start Num: 42

Candidate Starts for ZoeJ_61:

(Start: 42 @42753 has 138 MA's), (71, 42858), (88, 42957), (120, 43167), (150, 43401), (164, 43470), (173, 43518),