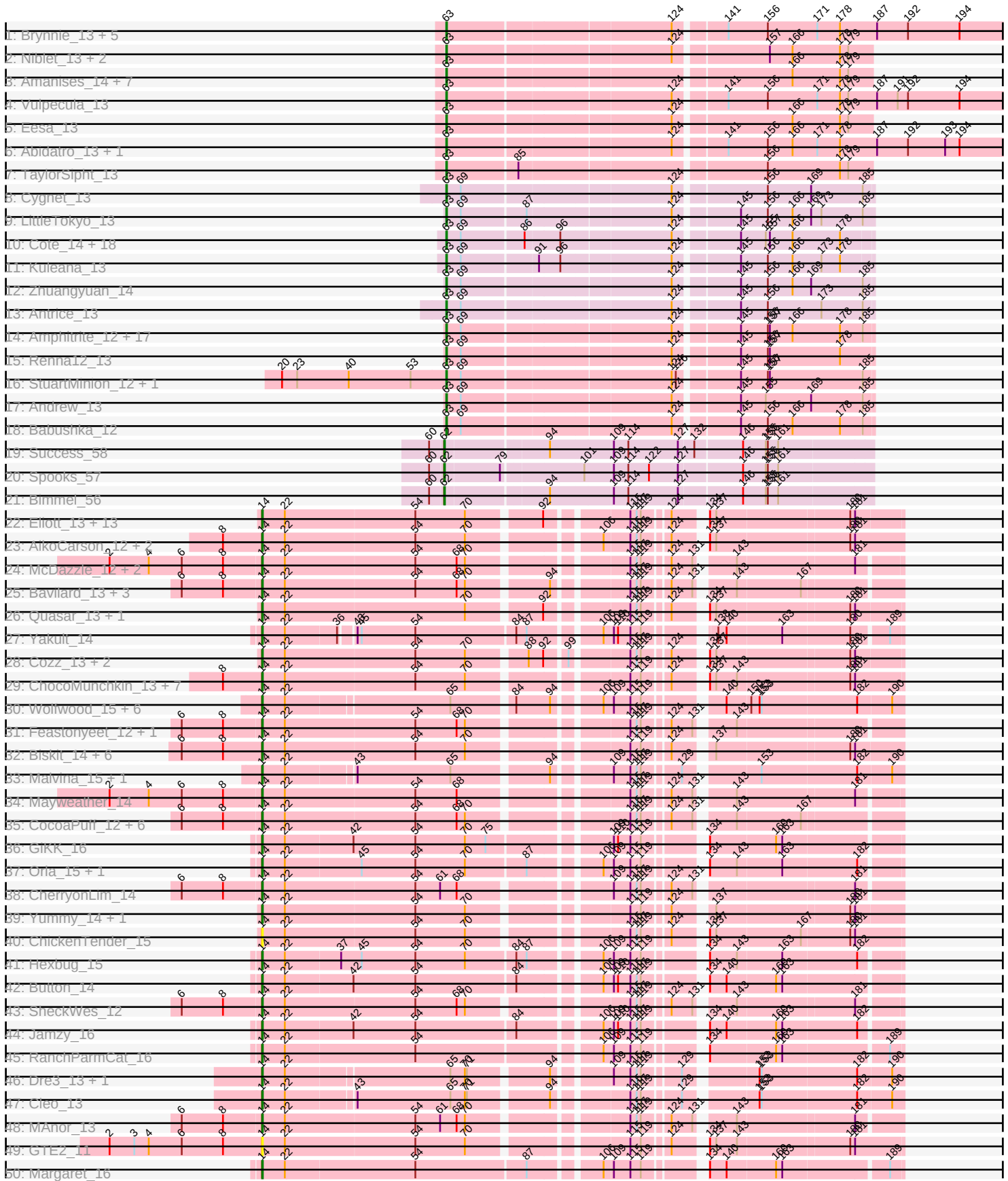
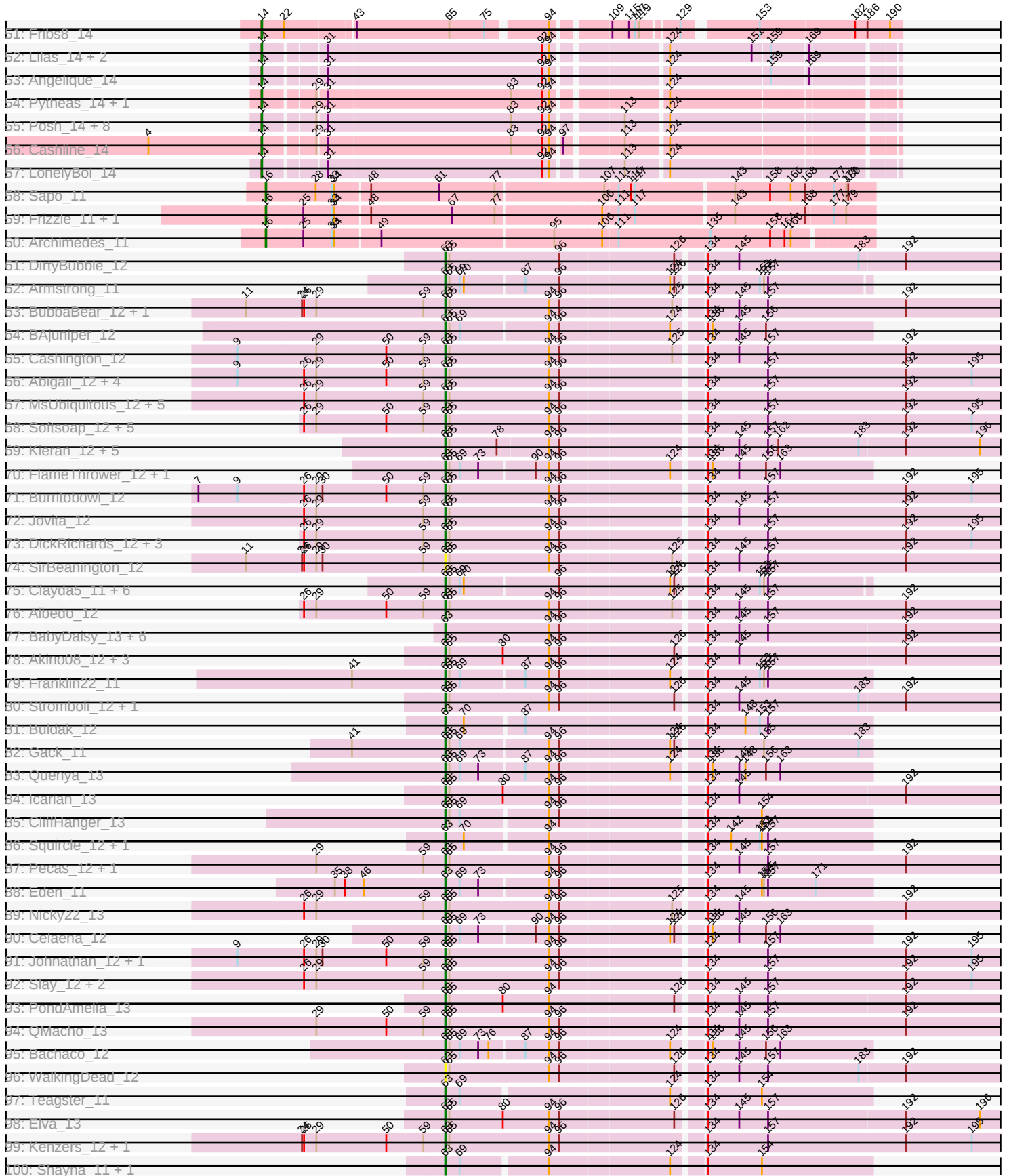
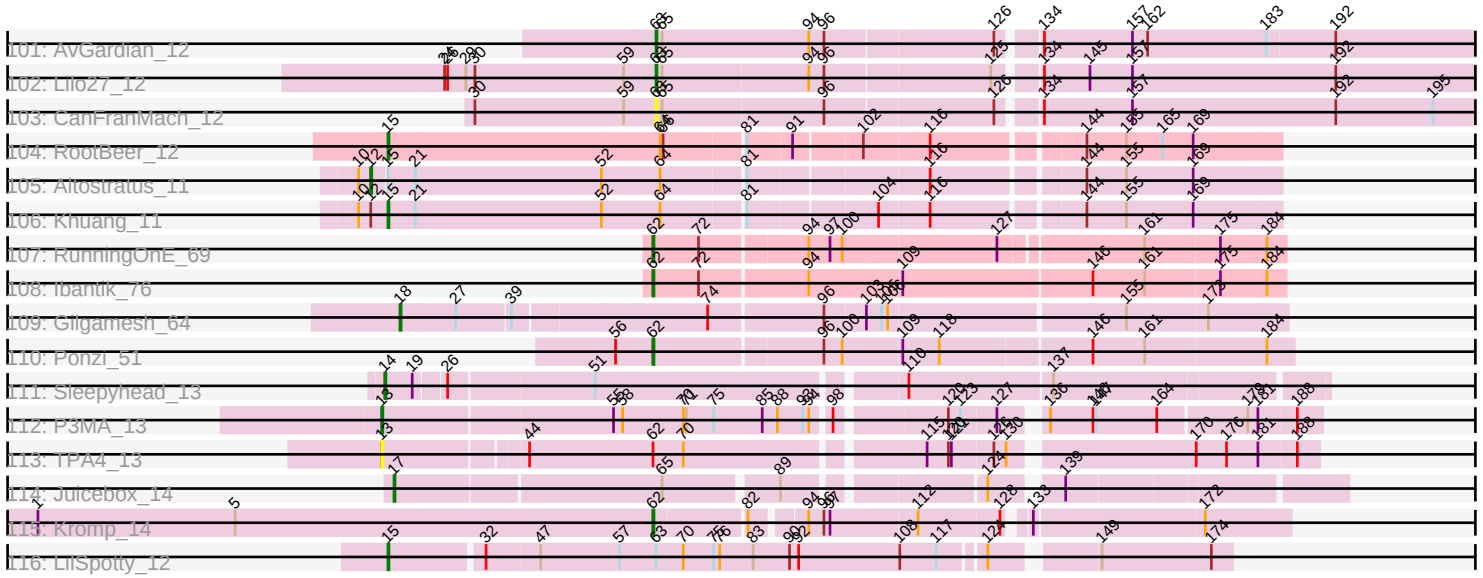




Pham 330419



Pham 330419



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 330419 Report

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

Pham number 330419 has 279 members, 38 are drafts.

Phages represented in each track:

- Track 1 : Brynnie_13, Ruchi_13, Jamun_13, Basilisk_13, Chickaboom_12, WileyE_12
- Track 2 : Niblet_13, Chicken_13, Zixiang_13
- Track 3 : Amanises_14, Pelletreau_14, Gravel_14, Toad24_14, Shen_14, Westrich_14, Orcanus_13, KendraB23_14
- Track 4 : Vulpecula_13
- Track 5 : Eesa_13
- Track 6 : Abidatro_13, Galaxy_13
- Track 7 : TaylorSipht_13
- Track 8 : Cygnet_13
- Track 9 : LittleTokyo_13
- Track 10 : Cote_14, Jerole_14, Polka_13, Pineda_14, Bibble12_14, Amelia_14, Bedetta_14, Lunar_14, Daob_14, PhirstandPhine_14, Coral_13, Melons_14, Colusalem_13, Damocles_14, Kepler_13, GramZayde_13, BadWillHunting_14, HannahPhantana_14, OtsoOtso_13
- Track 11 : Kuleana_13
- Track 12 : Zhuangyuan_14
- Track 13 : Antrice_13
- Track 14 : Amphitrite_12, HamCheese_12, Glotell_12, DanHam62_12, Fingolfin_12, Oppalora_12, KHumphrey_12, Laphuphu24k_12, Leona_12, AmiCi24_12, Juno112_12, PhluffyCoco_12, AdoptaAdorbs_12, Azaz_12, Atlantica_12, RedFox_12, Rattail_12, Camara_12
- Track 15 : Renna12_13
- Track 16 : StuartMinion_12, AlexMinion_12
- Track 17 : Andrew_13
- Track 18 : Babushka_12
- Track 19 : Success_58
- Track 20 : Spooks_57
- Track 21 : Bimmel_56
- Track 22 : Elliott_13, Agatha_13, Typhonmacy_13, GoldHunter_13, PsychoKiller_13, RSchmailzl_14, Carsonalex_14, Starburst_14, MunkgeeRoachy_13, RedBaron_15, RADical_14, Socotra_14, Burnsey_13, Sopespian_13
- Track 23 : AikoCarson_12, Amok_12, Emalyn_12
- Track 24 : McDazzle_12, ElJefes_12, Pons_13
- Track 25 : Bavidard_13, KayGee_13, Elinal_14, Yucky_13
- Track 26 : Quasar_13, Nina_14
- Track 27 : Yakult_14

- Track 28 : Cozz_13, Bubble_13, Axym_13
- Track 29 : ChocoMunchkin_13, SteamedHams_15, Tolls_15, BillDoor_15, AndPeggy_12, Yarn_12, CaramelLatte_13, CanesSauce_13
- Track 30 : Wolfwood_15, Zareef_15, Wallaby_17, Survivors_15, Nibbles_15, MaVan_15, Azira_15
- Track 31 : Feastonyeet_12, BigChungus_12
- Track 32 : Biskit_14, Buttrmlkdreams_13, SweatNTears_15, Troje_13, SketchMex_12, MScarn_15, Blondies_14
- Track 33 : Malvina_15, HippoPololi_15
- Track 34 : Mayweather_14
- Track 35 : CocoaPuff_12, Vine_14, PotPie_13, Balloona_12, SummitAcademy_12, Tarnish_13, Lauer_12
- Track 36 : GiKK_16
- Track 37 : Orla_15, Nodigi_15
- Track 38 : CherryonLim_14
- Track 39 : Yummy_14, Horseradish_14
- Track 40 : ChickenTender_15
- Track 41 : Hexbug_15
- Track 42 : Button_14
- Track 43 : SheckWes_12
- Track 44 : Jamzy_16
- Track 45 : RanchParmCat_16
- Track 46 : Dre3_13, Gibbous_13
- Track 47 : Cleo_13
- Track 48 : MAnor_13
- Track 49 : GTE2_11
- Track 50 : Margaret_16
- Track 51 : Fribs8_14
- Track 52 : Lilas_14, Bradissa_14, EnalisNailo_14
- Track 53 : Angelique_14
- Track 54 : Pytheas_14, Jablanski_14
- Track 55 : Posh_14, BritBrat_14, Floral_14, EMSquaredA_14, Pollux_14, Wrigley_14, Confidence_14, Marteena_14, BeeGee_14
- Track 56 : Cashline_14
- Track 57 : LonelyBoi_14
- Track 58 : Sapo_11
- Track 59 : Frizzle_11, Ghobes_11
- Track 60 : Archimedes_11
- Track 61 : DirtyBubble_12
- Track 62 : Armstrong_11
- Track 63 : BubbaBear_12, Phisb_12
- Track 64 : BAjuniper_12
- Track 65 : Cashington_12
- Track 66 : Abigail_12, Albright_12, LimaBean_12, Avacadoman_12, Doobus_12
- Track 67 : MsUbiquitous_12, AylexOG_13, TukTuk_12, CupcakePrincess_12, Finalfrontier_13, Jabb_12
- Track 68 : Softsoap_12, Arroyo_13, SansAfet_12, PhigPhack_12, Solea_13, Milomuff_13
- Track 69 : Kieran_12, ChiliPepper_12, Kamdara_12, Sharkboy_12, Dismas_12, Rona_12
- Track 70 : FlameThrower_12, Katzastrophic_12
- Track 71 : Burritobowl_12
- Track 72 : Jovita_12

- Track 73 : DickRichards_12, CroZenni_12, BelmontSKP_13, AnnaLie_13
- Track 74 : SirBeanington_12
- Track 75 : Clayda5_11, Coltrane_11, Bernstein_11, Vitas_11, Brahms_11, Rollins_11, Skylord_11
- Track 76 : Albedo_12
- Track 77 : BabyDaisy_13, Grist_12, Kate33_12, Didgeridoo_13, IndyLu_12, Lahqtemish_12, PastaFagioli_12
- Track 78 : Akino08_12, Stoor_12, SanaSana_13, Loviatar_12
- Track 79 : Franklin22_11
- Track 80 : Stromboli_12, BabyYoda_12
- Track 81 : Buldak_12
- Track 82 : Gack_11
- Track 83 : Quenya_13
- Track 84 : Icarian_13
- Track 85 : CliffHanger_13
- Track 86 : Squircle_12, Olliecat_12
- Track 87 : Pecas_12, Eula_12
- Track 88 : Eden_11
- Track 89 : Nicky22_13
- Track 90 : Celaena_12
- Track 91 : Johnathan_12, Bengal_12
- Track 92 : Slay_12, Swervy_12, SarBear_12
- Track 93 : PondAmelia_13
- Track 94 : QMacho_13
- Track 95 : Bachaco_12
- Track 96 : WalkingDead_12
- Track 97 : Teagster_11
- Track 98 : Elva_13
- Track 99 : Kenzers_12, Lynlen_12
- Track 100 : Shayna_11, SunnyD_11
- Track 101 : AvGardian_12
- Track 102 : Lilo27_12
- Track 103 : CanFranMach_12
- Track 104 : RootBeer_12
- Track 105 : Altostratus_11
- Track 106 : Khuang_11
- Track 107 : RunningOnE_69
- Track 108 : Ibantik_76
- Track 109 : Gilgamesh_64
- Track 110 : Ponzi_51
- Track 111 : Sleepyhead_13
- Track 112 : P3MA_13
- Track 113 : TPA4_13
- Track 114 : Juicebox_14
- Track 115 : Kromp_14
- Track 116 : LilSpotty_12

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

The start number called the most often in the published annotations is 63, it was called in 138 of the 241 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro_13, Abigail_12, AdoptaAdorbs_12, Akino08_12, Albedo_12, Albright_12, AlexMinion_12, Amanises_14, Amelia_14, AmiCi24_12, Amphitrite_12, Andrew_13, AnnaLie_13, Antrice_13, Armstrong_11, Arroyo_13, Atlantica_12, AvGardian_12, Avocadoman_12, AylexOG_13, Azaz_12, BAjuniper_12, Babushka_12, BabyDaisy_13, BabyYoda_12, Bachaco_12, BadWillHunting_14, Basilisk_13, Bedetta_14, BelmontSKP_13, Bengal_12, Bernstein_11, Bibble12_14, Brahms_11, Brynnie_13, BubbaBear_12, Buldak_12, Burritobowl_12, Camara_12, CanFranMach_12, Cashington_12, Celaena_12, Chickaboom_12, Chicken_13, ChiliPepper_12, Clayda5_11, CliffHanger_13, Coltrane_11, Colusalem_13, Coral_13, Cote_14, CroZenni_12, CupcakePrincess_12, Cygnet_13, Damocles_14, DanHam62_12, Daob_14, DickRichards_12, Didgeridoo_13, DirtyBubble_12, Dismas_12, Doobus_12, Eden_11, Eesa_13, Elva_13, Eula_12, Finalfrontier_13, Fingolfin_12, FlameThrower_12, Franklin22_11, Gack_11, Galaxy_13, Glotell_12, GramZayde_13, Gravel_14, Grist_12, HamCheese_12, HannahPhantana_14, Icarian_13, IndyLu_12, Jabb_12, Jamun_13, Jerole_14, Johnathan_12, Jovita_12, Juno112_12, KHumphrey_12, Kamdara_12, Kate33_12, Katzastrophic_12, KendraB23_14, Kenzers_12, Kepler_13, Kieran_12, Kuleana_13, Lahqtemish_12, Laphuphu24k_12, Leona_12, Lilo27_12, LimaBean_12, LittleTokyo_13, Loviatar_12, Lunar_14, Lynlen_12, Melons_14, Milomuff_13, MsUbiquitous_12, Niblet_13, Nicky22_13, Olliecat_12, Oppalora_12, Orcanus_13, OtsoOtso_13, PastaFagioli_12, Pecas_12, Pelletreau_14, PhigPhack_12, PhirstandPhine_14, Phisb_12, PhluffyCoco_12, Pineda_14, Polka_13, PondAmelia_13, QMacho_13, Quenya_13, Rattail_12, RedFox_12, Renna12_13, Rollins_11, Rona_12, Ruchi_13, SanaSana_13, SansAfet_12, SarBear_12, Sharkboy_12, Shayna_11, Shen_14, SirBeanington_12, Skylord_11, Slay_12, Softsoap_12, Solea_13, Squircle_12, Stoor_12, Stromboli_12, StuartMinion_12, SunnyD_11, Swervy_12, TaylorSipht_13, Teagster_11, Toad24_14, TukTuk_12, Vitas_11, Vulpecula_13, WalkingDead_12, Westrich_14, WileyE_12, Zhuangyuan_14, Zixiang_13,

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

- LilSpotty_12,

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

- Agatha_13, AikoCarson_12, Altostratus_11, Amok_12, AndPeggy_12, Angelique_14, Archimedes_11, Axym_13, Azira_15, Balloona_12, Bavidard_13, BeeGee_14, BigChungus_12, BillDoor_15, Bimmel_56, Biskit_14, Blondies_14, Bradissa_14, BritBrat_14, Bubble_13, Burnsey_13, Button_14, Buttrmlkdreams_13, CanesSauce_13, CaramelLatte_13, Carsonalex_14, Cashline_14, CherryonLim_14, ChickenTender_15, ChocoMunchkin_13, Cleo_13, CocoaPuff_12, Confidence_14, Cozz_13, Dre3_13, EMSquaredA_14, ElJefes_12, Elinal_14, Elliott_13, Emalyn_12, EnalisNailo_14, Feastonyeet_12, Floral_14, Fribs8_14, Frizzle_11, GTE2_11, Ghobes_11, GiKK_16, Gibbous_13, Gilgamesh_64, GoldHunter_13, Hexbug_15, HippoPololi_15, Horseradish_14, Ibantik_76, Jablanski_14, Jamzy_16, Juicebox_14, KayGee_13, Khuang_11, Kromp_14, Lauer_12, Lilas_14, LonelyBoi_14, MAnor_13, MScarn_15, MaVan_15, Malvina_15, Margaret_16, Marteena_14, Mayweather_14, McDazzle_12, MunkgeeRoachy_13, Nibbles_15, Nina_14, Nodigi_15, Orla_15, P3MA_13, Pollux_14, Pons_13, Ponzi_51, Posh_14, PotPie_13, PsychoKiller_13, Pytheas_14, Quasar_13, RADical_14, RSchmailzl_14, RanchParmCat_16, RedBaron_15, RootBeer_12, RunningOnE_69, Sapo_11, SheckWes_12,

SketchMex_12, Sleepyhead_13, Socotra_14, Sopespian_13, Spooks_57, Starburst_14, SteamedHams_15, Success_58, SummitAcademy_12, Survivors_15, SweatNTears_15, TPA4_13, Tarnish_13, Tolls_15, Troje_13, Typhonmarchy_13, Vine_14, Wallaby_17, Wolfwood_15, Wrigley_14, Yakult_14, Yarn_12, Yucky_13, Yummy_14, Zareef_15,

Summary by start number:

Start 12:

- Found in 2 of 279 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 241
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Altostratus_11 (FS),

Start 13:

- Found in 2 of 279 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 241
- Called 100.0% of time when present
- Phage (with cluster) where this start called: P3MA_13 (singleton), TPA4_13 (singleton),

Start 14:

- Found in 101 of 279 (36.2%) of genes in pham
- Manual Annotations of this start: 85 of 241
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agatha_13 (CT), AikoCarson_12 (CT), Amok_12 (CT), AndPeggy_12 (CT), Angelique_14 (CY1), Axym_13 (CT), Azira_15 (CT), Balloona_12 (CT), Bavidard_13 (CT), BeeGee_14 (CY5), BigChungus_12 (CT), BillDoor_15 (CT), Biskit_14 (CT), Blondies_14 (CT), Bradissa_14 (CY1), BritBrat_14 (CY2), Bubble_13 (CT), Burnsey_13 (CT), Button_14 (CT), Buttrmlkdreams_13 (CT), CanesSauce_13 (CT), CaramelLatte_13 (CT), Carsonalex_14 (CT), Cashline_14 (CY6), CherryonLim_14 (CT), ChickenTender_15 (CT), ChocoMunchkin_13 (CT), Cleo_13 (CT), CocoaPuff_12 (CT), Confidence_14 (CY1), Cozz_13 (CT), Dre3_13 (CT), EMSquaredA_14 (CY1), ElJefes_12 (CT), Elinal_14 (CT), Elliott_13 (CT), Emalyn_12 (CT), EnalisNailo_14 (CY1), Feastonyet_12 (CT), Floral_14 (CY1), Fribs8_14 (CT), GTE2_11 (CT), GiKK_16 (CT), Gibbous_13 (CT), GoldHunter_13 (CT), Hexbug_15 (CT), HippoPololi_15 (CT), Horseradish_14 (CT), Jablanski_14 (CY3), Jamzy_16 (CT), KayGee_13 (CT), Lauer_12 (CT), Lilas_14 (CY1), LonelyBoi_14 (CY7), MAnor_13 (CT), MScarn_15 (CT), MaVan_15 (CT), Malvina_15 (CT), Margaret_16 (CT), Marteena_14 (CY1), Mayweather_14 (CT), McDazzle_12 (CT), MunkgeeRoachy_13 (CT), Nibbles_15 (CT), Nina_14 (CT), Nodigi_15 (CT), Orla_15 (CT), Pollux_14 (CY1), Pons_13 (CT), Posh_14 (CY4), PotPie_13 (CT), PsychoKiller_13 (CT), Pytheas_14 (CY3), Quasar_13 (CT), RADical_14 (CT), RSchmailzl_14 (CT), RanchParmCat_16 (CT), RedBaron_15 (CT), SheckWes_12 (CT), SketchMex_12 (CT), Sleepyhead_13 (singleton), Socotra_14 (CT), Sopespian_13 (CT), Starburst_14 (CT), SteamedHams_15 (CT), SummitAcademy_12 (CT), Survivors_15 (CT), SweatNTears_15 (CT), Tarnish_13 (CT), Tolls_15 (CT), Troje_13 (CT), Typhonmarchy_13 (CT), Vine_14 (CT), Wallaby_17 (CT), Wolfwood_15 (CT), Wrigley_14 (CY4), Yakult_14 (CT), Yarn_12 (CT), Yucky_13 (CT), Yummy_14 (CT), Zareef_15 (CT),

Start 15:

- Found in 4 of 279 (1.4%) of genes in pham

- Manual Annotations of this start: 3 of 241
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Khuang_11 (FS), LilSpotty_12 (singleton), RootBeer_12 (FA),

Start 16:

- Found in 4 of 279 (1.4%) of genes in pham
- Manual Annotations of this start: 4 of 241
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archimedes_11 (DA), Frizzle_11 (DA), Ghobes_11 (DA), Sapo_11 (DA),

Start 17:

- Found in 1 of 279 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 241
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Juicebox_14 (singleton),

Start 18:

- Found in 1 of 279 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 241
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gilgamesh_64 (singleton),

Start 62:

- Found in 8 of 279 (2.9%) of genes in pham
- Manual Annotations of this start: 7 of 241
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Bimmel_56 (BT), Ibantik_76 (JN), Kromp_14 (singleton), Ponzi_51 (singleton), RunningOnE_69 (JN), Spooks_57 (BT), Success_58 (BT),

Start 63:

- Found in 160 of 279 (57.3%) of genes in pham
- Manual Annotations of this start: 138 of 241
- Called 99.4% of time when present
- Phage (with cluster) where this start called: Abidatro_13 (AS1), Abigail_12 (EB), AdoptaAdorbs_12 (AS3), Akino08_12 (EB), Albedo_12 (EB), Albright_12 (EB), AlexMinion_12 (AS3), Amanises_14 (AS1), Amelia_14 (AS2), AmiCi24_12 (AS3), Amphitrite_12 (AS3), Andrew_13 (AS3), AnnaLie_13 (EB), Antrice_13 (AS2), Armstrong_11 (EB), Arroyo_13 (EB), Atlantica_12 (AS3), AvGardian_12 (EB), Avocadoman_12 (EB), AylexOG_13 (EB), Azaz_12 (AS3), BAjuniper_12 (EB), Babushka_12 (AS3), BabyDaisy_13 (EB), BabyYoda_12 (EB), Bachaco_12 (EB), BadWillHunting_14 (AS2), Basilisk_13 (AS1), Bedetta_14 (AS2), BelmontSKP_13 (EB), Bengal_12 (EB), Bernstein_11 (EB), Bibble12_14 (AS2), Brahms_11 (EB), Brynnie_13 (AS1), BubbaBear_12 (EB), Buldak_12 (EB), Burritobowl_12 (EB), Camara_12 (AS3), CanFranMach_12 (EB), Cashington_12 (EB), Celaena_12 (EB), Chickaboom_12 (AS1), Chicken_13 (AS1), ChiliPepper_12 (EB), Clayda5_11 (EB), CliffHanger_13 (EB), Coltrane_11 (EB), Colusalem_13 (AS2), Coral_13 (AS2), Cote_14 (AS2), CroZenni_12 (EB), CupcakePrincess_12 (EB), Cygnet_13 (AS2), Damocles_14 (AS2), DanHam62_12 (AS3), Daob_14 (AS2), DickRichards_12 (EB), Didgeridoo_13 (EB), DirtyBubble_12 (EB), Dismas_12 (EB), Doobus_12 (EB), Eden_11 (EB), Eesa_13 (AS1), Elva_13 (EB), Eula_12 (EB), Finalfrontier_13 (EB),

Fingolfin_12 (AS3), FlameThrower_12 (EB), Franklin22_11 (EB), Gack_11 (EB), Galaxy_13 (AS1), Glotell_12 (AS3), GramZayde_13 (AS2), Gravel_14 (AS1), Grist_12 (EB), HamCheese_12 (AS3), HannahPhantana_14 (AS2), Icarian_13 (EB), IndyLu_12 (EB), Jabb_12 (EB), Jamun_13 (AS1), Jerole_14 (AS2), Johnathan_12 (EB), Jovita_12 (EB), Juno112_12 (AS3), KHumphrey_12 (AS3), Kamdara_12 (EB), Kate33_12 (EB), Katzastrophic_12 (EB), KendraB23_14 (AS1), Kenzers_12 (EB), Kepler_13 (AS2), Kieran_12 (EB), Kuleana_13 (AS2), Lahqtemish_12 (EB), Laphuphu24k_12 (AS3), Leona_12 (AS3), Lilo27_12 (EB), LimaBean_12 (EB), LittleTokyo_13 (AS2), Loviatar_12 (EB), Lunar_14 (AS2), Lynlen_12 (EB), Melons_14 (AS2), Milomuff_13 (EB), MsUbiquitous_12 (EB), Niblet_13 (AS1), Nicky22_13 (EB), Olliecat_12 (EB), Oppalora_12 (AS3), Orcanus_13 (AS1), OtsoOtso_13 (AS2), PastaFagioli_12 (EB), Pecas_12 (EB), Pelletreau_14 (AS1), PhigPhack_12 (EB), PhirstandPhine_14 (AS2), Phisb_12 (EB), PhluffyCoco_12 (AS3), Pineda_14 (AS2), Polka_13 (AS2), PondAmelia_13 (EB), QMacho_13 (EB), Quenya_13 (EB), Rattail_12 (AS3), RedFox_12 (AS3), Renna12_13 (AS3), Rollins_11 (EB), Rona_12 (EB), Ruchi_13 (AS1), SanaSana_13 (EB), SansAfet_12 (EB), SarBear_12 (EB), Sharkboy_12 (EB), Shayna_11 (EB), Shen_14 (AS1), SirBeanington_12 (EB), Skylord_11 (EB), Slay_12 (EB), Softsoap_12 (EB), Solea_13 (EB), Squirrel_12 (EB), Stoor_12 (EB), Stromboli_12 (EB), StuartMinion_12 (AS3), SunnyD_11 (EB), Swervy_12 (EB), TaylorSipht_13 (AS1), Teagster_11 (EB), Toad24_14 (AS1), TukTuk_12 (EB), Vitas_11 (EB), Vulpecula_13 (AS1), WalkingDead_12 (EB), Westrich_14 (AS1), WileyE_12 (AS1), Zhuangyuan_14 (AS2), Zixiang_13 (AS1),

Summary by clusters:

There are 18 clusters represented in this pham: AS3, AS2, singleton, FS, CY7, CY6, CY5, CY4, FA, AS1, CY2, EB, BT, CY1, JN, CY3, DA, CT,

Info for manual annotations of cluster AS1:

- Start number 63 was manually annotated 17 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 63 was manually annotated 19 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 63 was manually annotated 19 times for cluster AS3.

Info for manual annotations of cluster BT:

- Start number 62 was manually annotated 3 times for cluster BT.

Info for manual annotations of cluster CT:

- Start number 14 was manually annotated 67 times for cluster CT.

Info for manual annotations of cluster CY1:

- Start number 14 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 14 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:

- Start number 14 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 14 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:

- Start number 14 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:

- Start number 14 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:

- Start number 14 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster DA:

- Start number 16 was manually annotated 4 times for cluster DA.

Info for manual annotations of cluster EB:

- Start number 63 was manually annotated 83 times for cluster EB.

Info for manual annotations of cluster FA:

- Start number 15 was manually annotated 1 time for cluster FA.

Info for manual annotations of cluster FS:

- Start number 12 was manually annotated 1 time for cluster FS.
- Start number 15 was manually annotated 1 time for cluster FS.

Info for manual annotations of cluster JN:

- Start number 62 was manually annotated 2 times for cluster JN.

Gene Information:

Gene: Abidatro_13 Start: 8801, Stop: 9631, Start Num: 63

Candidate Starts for Abidatro_13:

(Start: 63 @8801 has 138 MA's), (124, 9110), (141, 9176), (156, 9233), (166, 9269), (171, 9305), (178, 9338), (187, 9392), (192, 9437), (193, 9491), (194, 9512),

Gene: Abigail_12 Start: 8439, Stop: 9236, Start Num: 63

Candidate Starts for Abigail_12:

(9, 8139), (26, 8235), (29, 8253), (50, 8355), (59, 8409), (Start: 63 @8439 has 138 MA's), (65, 8445), (94, 8586), (96, 8601), (134, 8793), (157, 8880), (192, 9081), (195, 9177),

Gene: AdoptaAdorbs_12 Start: 8378, Stop: 8959, Start Num: 63

Candidate Starts for AdoptaAdorbs_12:

(Start: 63 @8378 has 138 MA's), (69, 8399), (124, 8687), (145, 8771), (156, 8810), (157, 8813), (166, 8846), (178, 8915), (185, 8945),

Gene: Agatha_13 Start: 7939, Stop: 8781, Start Num: 14

Candidate Starts for Agatha_13:

(Start: 14 @7939 has 85 MA's), (22, 7972), (54, 8158), (70, 8230), (92, 8329), (115, 8431), (117, 8440), (119, 8446), (124, 8479), (134, 8515), (137, 8524), (180, 8710), (181, 8716),

Gene: AikoCarson_12 Start: 7662, Stop: 8510, Start Num: 14

Candidate Starts for AikoCarson_12:

(8, 7605), (Start: 14 @7662 has 85 MA's), (22, 7695), (54, 7881), (70, 7953), (106, 8118), (115, 8154), (117, 8163), (119, 8169), (124, 8202), (134, 8238), (137, 8247), (180, 8433), (181, 8439),

Gene: Akino08_12 Start: 8625, Stop: 9422, Start Num: 63

Candidate Starts for Akino08_12:

(Start: 63 @8625 has 138 MA's), (65, 8631), (80, 8709), (94, 8775), (96, 8790), (126, 8949), (134, 8982), (145, 9027), (192, 9267),

Gene: Albedo_12 Start: 8314, Stop: 9111, Start Num: 63

Candidate Starts for Albedo_12:

(26, 8110), (29, 8128), (50, 8230), (59, 8284), (Start: 63 @8314 has 138 MA's), (65, 8320), (94, 8461), (96, 8476), (125, 8632), (134, 8668), (145, 8713), (157, 8755), (192, 8956),

Gene: Albright_12 Start: 8320, Stop: 9117, Start Num: 63

Candidate Starts for Albright_12:

(9, 8020), (26, 8116), (29, 8134), (50, 8236), (59, 8290), (Start: 63 @8320 has 138 MA's), (65, 8326), (94, 8467), (96, 8482), (134, 8674), (157, 8761), (192, 8962), (195, 9058),

Gene: AlexMinion_12 Start: 8406, Stop: 8987, Start Num: 63

Candidate Starts for AlexMinion_12:

(20, 8169), (23, 8190), (40, 8265), (53, 8355), (Start: 63 @8406 has 138 MA's), (69, 8427), (124, 8715), (126, 8721), (145, 8799), (156, 8838), (157, 8841), (185, 8973),

Gene: Altostratus_11 Start: 7485, Stop: 8312, Start Num: 12

Candidate Starts for Altostratus_11:

(10, 7473), (Start: 12 @7485 has 1 MA's), (Start: 15 @7497 has 3 MA's), (21, 7524), (52, 7707), (64, 7761), (81, 7836), (116, 7992), (144, 8124), (155, 8163), (169, 8229),

Gene: Amanises_14 Start: 8961, Stop: 9545, Start Num: 63

Candidate Starts for Amanises_14:

(Start: 63 @8961 has 138 MA's), (166, 9429), (178, 9498), (179, 9510),

Gene: Amelia_14 Start: 8964, Stop: 9545, Start Num: 63

Candidate Starts for Amelia_14:

(Start: 63 @8964 has 138 MA's), (69, 8985), (86, 9072), (96, 9120), (124, 9273), (145, 9357), (155, 9393), (157, 9399), (166, 9432), (178, 9501),

Gene: AmiCi24_12 Start: 8378, Stop: 8959, Start Num: 63

Candidate Starts for AmiCi24_12:

(Start: 63 @8378 has 138 MA's), (69, 8399), (124, 8687), (145, 8771), (156, 8810), (157, 8813), (166, 8846), (178, 8915), (185, 8945),

Gene: Amok_12 Start: 7662, Stop: 8510, Start Num: 14

Candidate Starts for Amok_12:

(8, 7605), (Start: 14 @7662 has 85 MA's), (22, 7695), (54, 7881), (70, 7953), (106, 8118), (115, 8154), (117, 8163), (119, 8169), (124, 8202), (134, 8238), (137, 8247), (180, 8433), (181, 8439),

Gene: Amphitrite_12 Start: 8376, Stop: 8957, Start Num: 63

Candidate Starts for Amphitrite_12:

(Start: 63 @8376 has 138 MA's), (69, 8397), (124, 8685), (145, 8769), (156, 8808), (157, 8811), (166, 8844), (178, 8913), (185, 8943),

Gene: AndPeggy_12 Start: 7953, Stop: 8798, Start Num: 14

Candidate Starts for AndPeggy_12:

(8, 7896), (Start: 14 @7953 has 85 MA's), (22, 7986), (54, 8172), (70, 8244), (115, 8445), (119, 8460), (124, 8493), (134, 8529), (137, 8538), (143, 8568), (180, 8724), (181, 8730),

Gene: Andrew_13 Start: 8753, Stop: 9334, Start Num: 63

Candidate Starts for Andrew_13:

(Start: 63 @8753 has 138 MA's), (69, 8774), (124, 9062), (145, 9146), (155, 9182), (169, 9248), (185, 9320),

Gene: Angelique_14 Start: 8715, Stop: 9560, Start Num: 14

Candidate Starts for Angelique_14:

(Start: 14 @8715 has 85 MA's), (31, 8796), (92, 9105), (94, 9114), (124, 9255), (159, 9396), (169, 9447),

Gene: AnnaLie_13 Start: 8729, Stop: 9526, Start Num: 63

Candidate Starts for AnnaLie_13:

(26, 8525), (29, 8543), (59, 8699), (Start: 63 @8729 has 138 MA's), (65, 8735), (94, 8876), (96, 8891), (134, 9083), (157, 9170), (192, 9371), (195, 9467),

Gene: Antrice_13 Start: 8717, Stop: 9298, Start Num: 63

Candidate Starts for Antrice_13:

(Start: 63 @8717 has 138 MA's), (69, 8738), (124, 9026), (145, 9110), (156, 9149), (173, 9227), (185, 9284),

Gene: Archimedes_11 Start: 7355, Stop: 8200, Start Num: 16

Candidate Starts for Archimedes_11:

(Start: 16 @7355 has 4 MA's), (25, 7409), (33, 7451), (34, 7454), (49, 7517), (95, 7760), (106, 7826), (111, 7847), (135, 7976), (158, 8060), (164, 8081), (166, 8090),

Gene: Armstrong_11 Start: 8096, Stop: 8680, Start Num: 63

Candidate Starts for Armstrong_11:

(Start: 63 @8096 has 138 MA's), (65, 8102), (69, 8117), (70, 8123), (87, 8207), (96, 8255), (124, 8408), (126, 8414), (134, 8447), (153, 8522), (155, 8528), (157, 8534),

Gene: Arroyo_13 Start: 8790, Stop: 9587, Start Num: 63

Candidate Starts for Arroyo_13:

(26, 8586), (29, 8604), (50, 8706), (59, 8760), (Start: 63 @8790 has 138 MA's), (65, 8796), (94, 8937), (96, 8952), (134, 9144), (157, 9231), (192, 9432), (195, 9528),

Gene: Atlantica_12 Start: 8378, Stop: 8959, Start Num: 63

Candidate Starts for Atlantica_12:

(Start: 63 @8378 has 138 MA's), (69, 8399), (124, 8687), (145, 8771), (156, 8810), (157, 8813), (166, 8846), (178, 8915), (185, 8945),

Gene: AvGardian_12 Start: 8379, Stop: 9176, Start Num: 63

Candidate Starts for AvGardian_12:

(Start: 63 @8379 has 138 MA's), (65, 8385), (94, 8529), (96, 8544), (126, 8703), (134, 8736), (157, 8823), (162, 8838), (183, 8955), (192, 9021),

Gene: Avocadoman_12 Start: 8378, Stop: 9175, Start Num: 63

Candidate Starts for Avocadoman_12:

(9, 8078), (26, 8174), (29, 8192), (50, 8294), (59, 8348), (Start: 63 @8378 has 138 MA's), (65, 8384), (94, 8525), (96, 8540), (134, 8732), (157, 8819), (192, 9020), (195, 9116),

Gene: Axym_13 Start: 7939, Stop: 8781, Start Num: 14

Candidate Starts for Axym_13:

(Start: 14 @7939 has 85 MA's), (22, 7972), (54, 8158), (70, 8230), (88, 8308), (92, 8329), (99, 8356), (115, 8431), (117, 8440), (119, 8446), (124, 8479), (134, 8515), (137, 8524), (180, 8710), (181, 8716),

Gene: AylexOG_13 Start: 8665, Stop: 9462, Start Num: 63

Candidate Starts for AylexOG_13:

(26, 8461), (29, 8479), (59, 8635), (Start: 63 @8665 has 138 MA's), (65, 8671), (94, 8812), (96, 8827), (134, 9019), (157, 9106), (192, 9307),

Gene: Azaz_12 Start: 8429, Stop: 9010, Start Num: 63

Candidate Starts for Azaz_12:

(Start: 63 @8429 has 138 MA's), (69, 8450), (124, 8738), (145, 8822), (156, 8861), (157, 8864), (166, 8897), (178, 8966), (185, 8996),

Gene: Azira_15 Start: 8878, Stop: 9717, Start Num: 14

Candidate Starts for Azira_15:

(Start: 14 @8878 has 85 MA's), (22, 8911), (65, 9139), (84, 9220), (94, 9268), (106, 9325), (109, 9337), (115, 9361), (119, 9376), (140, 9469), (150, 9502), (152, 9514), (153, 9517), (182, 9652), (190, 9700),

Gene: BAjuniper_12 Start: 8258, Stop: 8848, Start Num: 63

Candidate Starts for BAjuniper_12:

(Start: 63 @8258 has 138 MA's), (65, 8264), (69, 8279), (94, 8402), (96, 8417), (124, 8570), (134, 8609), (136, 8615), (145, 8654), (156, 8693),

Gene: Babushka_12 Start: 8426, Stop: 9007, Start Num: 63

Candidate Starts for Babushka_12:

(Start: 63 @8426 has 138 MA's), (69, 8447), (124, 8735), (145, 8819), (156, 8858), (166, 8894), (178, 8963), (185, 8993),

Gene: BabyDaisy_13 Start: 8547, Stop: 9341, Start Num: 63

Candidate Starts for BabyDaisy_13:

(Start: 63 @8547 has 138 MA's), (94, 8694), (96, 8709), (134, 8901), (145, 8946), (157, 8988), (192, 9186),

Gene: BabyYoda_12 Start: 8571, Stop: 9368, Start Num: 63

Candidate Starts for BabyYoda_12:

(Start: 63 @8571 has 138 MA's), (65, 8577), (94, 8721), (96, 8736), (126, 8895), (134, 8928), (145, 8973), (183, 9147), (192, 9213),

Gene: Bachaco_12 Start: 8464, Stop: 9054, Start Num: 63

Candidate Starts for Bachaco_12:

(Start: 63 @8464 has 138 MA's), (65, 8470), (69, 8485), (73, 8512), (76, 8527), (87, 8575), (94, 8608), (96, 8623), (124, 8776), (134, 8815), (136, 8821), (145, 8860), (156, 8899), (163, 8920),

Gene: BadWillHunting_14 Start: 8964, Stop: 9545, Start Num: 63

Candidate Starts for BadWillHunting_14:

(Start: 63 @8964 has 138 MA's), (69, 8985), (86, 9072), (96, 9120), (124, 9273), (145, 9357), (155, 9393), (157, 9399), (166, 9432), (178, 9501),

Gene: Balloona_12 Start: 7701, Stop: 8540, Start Num: 14

Candidate Starts for Balloona_12:

(6, 7587), (8, 7647), (Start: 14 @7701 has 85 MA's), (22, 7734), (54, 7920), (68, 7980), (70, 7992), (115, 8193), (117, 8202), (119, 8208), (124, 8241), (131, 8271), (143, 8316), (167, 8406),

Gene: Basilisk_13 Start: 9125, Stop: 9955, Start Num: 63

Candidate Starts for Basilisk_13:

(Start: 63 @9125 has 138 MA's), (124, 9434), (141, 9500), (156, 9557), (171, 9629), (178, 9662), (187, 9716), (192, 9761), (194, 9836),

Gene: Bavilard_13 Start: 8481, Stop: 9320, Start Num: 14

Candidate Starts for Bavilard_13:

(6, 8367), (8, 8427), (Start: 14 @8481 has 85 MA's), (22, 8514), (54, 8700), (68, 8760), (70, 8772), (94, 8880), (115, 8973), (117, 8982), (119, 8988), (124, 9021), (131, 9051), (143, 9096), (167, 9186),

Gene: Bedetta_14 Start: 8964, Stop: 9545, Start Num: 63

Candidate Starts for Bedetta_14:

(Start: 63 @8964 has 138 MA's), (69, 8985), (86, 9072), (96, 9120), (124, 9273), (145, 9357), (155, 9393), (157, 9399), (166, 9432), (178, 9501),

Gene: BeeGee_14 Start: 8711, Stop: 9556, Start Num: 14

Candidate Starts for BeeGee_14:

(Start: 14 @8711 has 85 MA's), (29, 8780), (31, 8792), (83, 9056), (92, 9101), (94, 9110), (113, 9197), (124, 9251),

Gene: BelmontSKP_13 Start: 8729, Stop: 9526, Start Num: 63

Candidate Starts for BelmontSKP_13:

(26, 8525), (29, 8543), (59, 8699), (Start: 63 @8729 has 138 MA's), (65, 8735), (94, 8876), (96, 8891), (134, 9083), (157, 9170), (192, 9371), (195, 9467),

Gene: Bengal_12 Start: 8320, Stop: 9117, Start Num: 63

Candidate Starts for Bengal_12:

(9, 8020), (26, 8116), (29, 8134), (30, 8143), (50, 8236), (59, 8290), (Start: 63 @8320 has 138 MA's), (65, 8326), (94, 8467), (96, 8482), (134, 8674), (157, 8761), (192, 8962), (195, 9058),

Gene: Bernstein_11 Start: 8156, Stop: 8740, Start Num: 63

Candidate Starts for Bernstein_11:

(Start: 63 @8156 has 138 MA's), (65, 8162), (69, 8177), (70, 8183), (96, 8315), (124, 8468), (126, 8474), (134, 8507), (153, 8582), (155, 8588), (157, 8594),

Gene: Bibble12_14 Start: 8967, Stop: 9548, Start Num: 63

Candidate Starts for Bibble12_14:

(Start: 63 @8967 has 138 MA's), (69, 8988), (86, 9075), (96, 9123), (124, 9276), (145, 9360), (155, 9396), (157, 9402), (166, 9435), (178, 9504),

Gene: BigChungus_12 Start: 7726, Stop: 8565, Start Num: 14

Candidate Starts for BigChungus_12:

(6, 7612), (8, 7672), (Start: 14 @7726 has 85 MA's), (22, 7759), (54, 7945), (68, 8005), (70, 8017), (115, 8218), (117, 8227), (119, 8233), (124, 8266), (131, 8296), (143, 8341),

Gene: BillDoor_15 Start: 7918, Stop: 8763, Start Num: 14

Candidate Starts for BillDoor_15:

(8, 7861), (Start: 14 @7918 has 85 MA's), (22, 7951), (54, 8137), (70, 8209), (115, 8410), (119, 8425), (124, 8458), (134, 8494), (137, 8503), (143, 8533), (180, 8689), (181, 8695),

Gene: Bimmel_56 Start: 31804, Stop: 32394, Start Num: 62

Candidate Starts for Bimmel_56:

(60, 31786), (Start: 62 @31804 has 7 MA's), (94, 31942), (109, 32029), (114, 32050), (127, 32122), (146, 32209), (155, 32242), (156, 32245), (161, 32260),

Gene: Biskit_14 Start: 7925, Stop: 8770, Start Num: 14

Candidate Starts for Biskit_14:

(6, 7808), (8, 7868), (Start: 14 @7925 has 85 MA's), (22, 7958), (54, 8144), (70, 8216), (115, 8417), (119, 8432), (124, 8465), (137, 8510), (180, 8696), (181, 8702),

Gene: Blondies_14 Start: 7911, Stop: 8756, Start Num: 14

Candidate Starts for Blondies_14:

(6, 7794), (8, 7854), (Start: 14 @7911 has 85 MA's), (22, 7944), (54, 8130), (70, 8202), (115, 8403), (119, 8418), (124, 8451), (137, 8496), (180, 8682), (181, 8688),

Gene: Bradissa_14 Start: 8715, Stop: 9560, Start Num: 14

Candidate Starts for Bradissa_14:

(Start: 14 @8715 has 85 MA's), (31, 8796), (92, 9105), (94, 9114), (124, 9255), (151, 9372), (159, 9396), (169, 9447),

Gene: Brahms_11 Start: 8096, Stop: 8680, Start Num: 63

Candidate Starts for Brahms_11:

(Start: 63 @8096 has 138 MA's), (65, 8102), (69, 8117), (70, 8123), (96, 8255), (124, 8408), (126, 8414), (134, 8447), (153, 8522), (155, 8528), (157, 8534),

Gene: BritBrat_14 Start: 8717, Stop: 9562, Start Num: 14

Candidate Starts for BritBrat_14:

(Start: 14 @8717 has 85 MA's), (29, 8786), (31, 8798), (83, 9062), (92, 9107), (94, 9116), (113, 9203), (124, 9257),

Gene: Brynnie_13 Start: 8937, Stop: 9767, Start Num: 63

Candidate Starts for Brynnie_13:

(Start: 63 @8937 has 138 MA's), (124, 9246), (141, 9312), (156, 9369), (171, 9441), (178, 9474), (187, 9528), (192, 9573), (194, 9648),

Gene: BubbaBear_12 Start: 8314, Stop: 9111, Start Num: 63

Candidate Starts for BubbaBear_12:

(11, 8026), (24, 8107), (26, 8110), (29, 8128), (59, 8284), (Start: 63 @8314 has 138 MA's), (65, 8320), (94, 8461), (96, 8476), (125, 8632), (134, 8668), (145, 8713), (157, 8755), (192, 8956),

Gene: Bubble_13 Start: 7939, Stop: 8781, Start Num: 14

Candidate Starts for Bubble_13:

(Start: 14 @7939 has 85 MA's), (22, 7972), (54, 8158), (70, 8230), (88, 8308), (92, 8329), (99, 8356), (115, 8431), (117, 8440), (119, 8446), (124, 8479), (134, 8515), (137, 8524), (180, 8710), (181, 8716),

Gene: Buldak_12 Start: 8598, Stop: 9185, Start Num: 63

Candidate Starts for Buldak_12:

(Start: 63 @8598 has 138 MA's), (70, 8625), (87, 8706), (134, 8946), (148, 9000), (153, 9021), (157, 9033),

Gene: Burnsey_13 Start: 7940, Stop: 8782, Start Num: 14

Candidate Starts for Burnsey_13:

(Start: 14 @7940 has 85 MA's), (22, 7973), (54, 8159), (70, 8231), (92, 8330), (115, 8432), (117, 8441), (119, 8447), (124, 8480), (134, 8516), (137, 8525), (180, 8711), (181, 8717),

Gene: Burritobowl_12 Start: 8347, Stop: 9144, Start Num: 63

Candidate Starts for Burritobowl_12:

(7, 7990), (9, 8047), (26, 8143), (29, 8161), (30, 8170), (50, 8263), (59, 8317), (Start: 63 @8347 has 138 MA's), (65, 8353), (94, 8494), (96, 8509), (134, 8701), (157, 8788), (192, 8989), (195, 9085),

Gene: Button_14 Start: 7947, Stop: 8795, Start Num: 14

Candidate Starts for Button_14:

(Start: 14 @7947 has 85 MA's), (22, 7980), (42, 8076), (54, 8166), (84, 8307), (106, 8412), (109, 8424), (110, 8430), (115, 8448), (117, 8457), (119, 8463), (134, 8532), (140, 8556), (160, 8625), (163, 8634),

Gene: Buttrmlkdreams_13 Start: 7910, Stop: 8755, Start Num: 14

Candidate Starts for Buttrmlkdreams_13:

(6, 7793), (8, 7853), (Start: 14 @7910 has 85 MA's), (22, 7943), (54, 8129), (70, 8201), (115, 8402), (119, 8417), (124, 8450), (137, 8495), (180, 8681), (181, 8687),

Gene: Camara_12 Start: 8379, Stop: 8960, Start Num: 63

Candidate Starts for Camara_12:

(Start: 63 @8379 has 138 MA's), (69, 8400), (124, 8688), (145, 8772), (156, 8811), (157, 8814), (166, 8847), (178, 8916), (185, 8946),

Gene: CanFranMach_12 Start: 8337, Stop: 9134, Start Num: 63

Candidate Starts for CanFranMach_12:

(30, 8160), (59, 8307), (Start: 63 @8337 has 138 MA's), (65, 8343), (96, 8499), (126, 8658), (134, 8691), (157, 8778), (192, 8979), (195, 9075),

Gene: CanesSauce_13 Start: 7954, Stop: 8799, Start Num: 14

Candidate Starts for CanesSauce_13:

(8, 7897), (Start: 14 @7954 has 85 MA's), (22, 7987), (54, 8173), (70, 8245), (115, 8446), (119, 8461), (124, 8494), (134, 8530), (137, 8539), (143, 8569), (180, 8725), (181, 8731),

Gene: CaramellLatte_13 Start: 7954, Stop: 8799, Start Num: 14

Candidate Starts for CaramellLatte_13:

(8, 7897), (Start: 14 @7954 has 85 MA's), (22, 7987), (54, 8173), (70, 8245), (115, 8446), (119, 8461), (124, 8494), (134, 8530), (137, 8539), (143, 8569), (180, 8725), (181, 8731),

Gene: Carsonalex_14 Start: 7996, Stop: 8838, Start Num: 14

Candidate Starts for Carsonalex_14:

(Start: 14 @7996 has 85 MA's), (22, 8029), (54, 8215), (70, 8287), (92, 8386), (115, 8488), (117, 8497), (119, 8503), (124, 8536), (134, 8572), (137, 8581), (180, 8767), (181, 8773),

Gene: Cashington_12 Start: 8337, Stop: 9134, Start Num: 63

Candidate Starts for Cashington_12:

(9, 8037), (29, 8151), (50, 8253), (59, 8307), (Start: 63 @8337 has 138 MA's), (65, 8343), (94, 8484), (96, 8499), (125, 8655), (134, 8691), (145, 8736), (157, 8778), (192, 8979),

Gene: Cashline_14 Start: 8571, Stop: 9416, Start Num: 14

Candidate Starts for Cashline_14:

(4, 8409), (Start: 14 @8571 has 85 MA's), (29, 8640), (31, 8652), (83, 8916), (92, 8961), (94, 8970), (97, 8982), (113, 9057), (124, 9111),

Gene: Celaena_12 Start: 8400, Stop: 8990, Start Num: 63

Candidate Starts for Celaena_12:

(Start: 63 @8400 has 138 MA's), (65, 8406), (69, 8421), (73, 8448), (90, 8526), (94, 8544), (96, 8559), (124, 8712), (126, 8718), (134, 8751), (136, 8757), (145, 8796), (156, 8835), (163, 8856),

Gene: CherryonLim_14 Start: 8452, Stop: 9291, Start Num: 14

Candidate Starts for CherryonLim_14:

(6, 8338), (8, 8398), (Start: 14 @8452 has 85 MA's), (22, 8485), (54, 8671), (61, 8707), (68, 8731), (109, 8920), (115, 8944), (117, 8953), (119, 8959), (124, 8992), (131, 9022), (181, 9229),

Gene: Chickaboom_12 Start: 8482, Stop: 9312, Start Num: 63

Candidate Starts for Chickaboom_12:

(Start: 63 @8482 has 138 MA's), (124, 8791), (141, 8857), (156, 8914), (171, 8986), (178, 9019), (187, 9073), (192, 9118), (194, 9193),

Gene: Chicken_13 Start: 8750, Stop: 9334, Start Num: 63

Candidate Starts for Chicken_13:

(Start: 63 @8750 has 138 MA's), (124, 9059), (157, 9185), (166, 9218), (178, 9287), (179, 9299),

Gene: ChickenTender_15 Start: 7982, Stop: 8830, Start Num: 14

Candidate Starts for ChickenTender_15:

(Start: 14 @7982 has 85 MA's), (22, 8015), (54, 8201), (70, 8273), (115, 8474), (117, 8483), (119, 8489), (124, 8522), (134, 8558), (137, 8567), (167, 8687), (180, 8756), (181, 8762),

Gene: ChiliPepper_12 Start: 8556, Stop: 9350, Start Num: 63

Candidate Starts for ChiliPepper_12:

(Start: 63 @8556 has 138 MA's), (65, 8562), (78, 8631), (94, 8703), (96, 8718), (134, 8910), (145, 8955), (157, 8997), (162, 9012), (183, 9129), (192, 9195), (196, 9303),

Gene: ChocoMunchkin_13 Start: 7954, Stop: 8799, Start Num: 14

Candidate Starts for ChocoMunchkin_13:

(8, 7897), (Start: 14 @7954 has 85 MA's), (22, 7987), (54, 8173), (70, 8245), (115, 8446), (119, 8461), (124, 8494), (134, 8530), (137, 8539), (143, 8569), (180, 8725), (181, 8731),

Gene: Clayda5_11 Start: 8096, Stop: 8680, Start Num: 63

Candidate Starts for Clayda5_11:

(Start: 63 @8096 has 138 MA's), (65, 8102), (69, 8117), (70, 8123), (96, 8255), (124, 8408), (126, 8414), (134, 8447), (153, 8522), (155, 8528), (157, 8534),

Gene: Cleo_13 Start: 8168, Stop: 9007, Start Num: 14

Candidate Starts for Cleo_13:

(Start: 14 @8168 has 85 MA's), (22, 8201), (43, 8294), (65, 8429), (70, 8450), (71, 8453), (94, 8558), (115, 8651), (117, 8660), (119, 8666), (129, 8714), (152, 8804), (153, 8807), (182, 8942), (190, 8990),

Gene: CliffHanger_13 Start: 8293, Stop: 8880, Start Num: 63

Candidate Starts for CliffHanger_13:

(Start: 63 @8293 has 138 MA's), (65, 8299), (69, 8314), (94, 8434), (96, 8449), (134, 8641), (154, 8719),

Gene: CocoaPuff_12 Start: 7701, Stop: 8540, Start Num: 14

Candidate Starts for CocoaPuff_12:

(6, 7587), (8, 7647), (Start: 14 @7701 has 85 MA's), (22, 7734), (54, 7920), (68, 7980), (70, 7992), (115, 8193), (117, 8202), (119, 8208), (124, 8241), (131, 8271), (143, 8316), (167, 8406),

Gene: Coltrane_11 Start: 8096, Stop: 8680, Start Num: 63

Candidate Starts for Coltrane_11:

(Start: 63 @8096 has 138 MA's), (65, 8102), (69, 8117), (70, 8123), (96, 8255), (124, 8408), (126, 8414), (134, 8447), (153, 8522), (155, 8528), (157, 8534),

Gene: Colusalem_13 Start: 8803, Stop: 9384, Start Num: 63

Candidate Starts for Colusalem_13:

(Start: 63 @8803 has 138 MA's), (69, 8824), (86, 8911), (96, 8959), (124, 9112), (145, 9196), (155, 9232), (157, 9238), (166, 9271), (178, 9340),

Gene: Confidence_14 Start: 8711, Stop: 9556, Start Num: 14

Candidate Starts for Confidence_14:

(Start: 14 @8711 has 85 MA's), (29, 8780), (31, 8792), (83, 9056), (92, 9101), (94, 9110), (113, 9197), (124, 9251),

Gene: Coral_13 Start: 8803, Stop: 9384, Start Num: 63

Candidate Starts for Coral_13:

(Start: 63 @8803 has 138 MA's), (69, 8824), (86, 8911), (96, 8959), (124, 9112), (145, 9196), (155, 9232), (157, 9238), (166, 9271), (178, 9340),

Gene: Cote_14 Start: 8964, Stop: 9545, Start Num: 63

Candidate Starts for Cote_14:

(Start: 63 @8964 has 138 MA's), (69, 8985), (86, 9072), (96, 9120), (124, 9273), (145, 9357), (155, 9393), (157, 9399), (166, 9432), (178, 9501),

Gene: Cozz_13 Start: 7940, Stop: 8782, Start Num: 14

Candidate Starts for Cozz_13:

(Start: 14 @7940 has 85 MA's), (22, 7973), (54, 8159), (70, 8231), (88, 8309), (92, 8330), (99, 8357), (115, 8432), (117, 8441), (119, 8447), (124, 8480), (134, 8516), (137, 8525), (180, 8711), (181, 8717),

Gene: CroZenni_12 Start: 8320, Stop: 9117, Start Num: 63

Candidate Starts for CroZenni_12:

(26, 8116), (29, 8134), (59, 8290), (Start: 63 @8320 has 138 MA's), (65, 8326), (94, 8467), (96, 8482), (134, 8674), (157, 8761), (192, 8962), (195, 9058),

Gene: CupcakePrincess_12 Start: 8360, Stop: 9157, Start Num: 63

Candidate Starts for CupcakePrincess_12:

(26, 8156), (29, 8174), (59, 8330), (Start: 63 @8360 has 138 MA's), (65, 8366), (94, 8507), (96, 8522), (134, 8714), (157, 8801), (192, 9002),

Gene: Cygnet_13 Start: 8759, Stop: 9340, Start Num: 63

Candidate Starts for Cygnet_13:

(Start: 63 @8759 has 138 MA's), (69, 8780), (124, 9068), (156, 9191), (169, 9254), (185, 9326),

Gene: Damocles_14 Start: 8964, Stop: 9545, Start Num: 63

Candidate Starts for Damocles_14:

(Start: 63 @8964 has 138 MA's), (69, 8985), (86, 9072), (96, 9120), (124, 9273), (145, 9357), (155, 9393), (157, 9399), (166, 9432), (178, 9501),

Gene: DanHam62_12 Start: 8378, Stop: 8959, Start Num: 63

Candidate Starts for DanHam62_12:

(Start: 63 @8378 has 138 MA's), (69, 8399), (124, 8687), (145, 8771), (156, 8810), (157, 8813), (166, 8846), (178, 8915), (185, 8945),

Gene: Daob_14 Start: 8967, Stop: 9548, Start Num: 63

Candidate Starts for Daob_14:

(Start: 63 @8967 has 138 MA's), (69, 8988), (86, 9075), (96, 9123), (124, 9276), (145, 9360), (155, 9396), (157, 9402), (166, 9435), (178, 9504),

Gene: DickRichards_12 Start: 8814, Stop: 9611, Start Num: 63

Candidate Starts for DickRichards_12:

(26, 8610), (29, 8628), (59, 8784), (Start: 63 @8814 has 138 MA's), (65, 8820), (94, 8961), (96, 8976), (134, 9168), (157, 9255), (192, 9456), (195, 9552),

Gene: Didgeridoo_13 Start: 8549, Stop: 9343, Start Num: 63

Candidate Starts for Didgeridoo_13:

(Start: 63 @8549 has 138 MA's), (94, 8696), (96, 8711), (134, 8903), (145, 8948), (157, 8990), (192, 9188),

Gene: DirtyBubble_12 Start: 8579, Stop: 9376, Start Num: 63

Candidate Starts for DirtyBubble_12:

(Start: 63 @8579 has 138 MA's), (65, 8585), (96, 8744), (126, 8903), (134, 8936), (145, 8981), (183, 9155), (192, 9221),

Gene: Dismas_12 Start: 8556, Stop: 9350, Start Num: 63

Candidate Starts for Dismas_12:

(Start: 63 @8556 has 138 MA's), (65, 8562), (78, 8631), (94, 8703), (96, 8718), (134, 8910), (145, 8955), (157, 8997), (162, 9012), (183, 9129), (192, 9195), (196, 9303),

Gene: Doobus_12 Start: 8551, Stop: 9348, Start Num: 63

Candidate Starts for Doobus_12:

(9, 8251), (26, 8347), (29, 8365), (50, 8467), (59, 8521), (Start: 63 @8551 has 138 MA's), (65, 8557), (94, 8698), (96, 8713), (134, 8905), (157, 8992), (192, 9193), (195, 9289),

Gene: Dre3_13 Start: 8115, Stop: 8954, Start Num: 14

Candidate Starts for Dre3_13:

(Start: 14 @8115 has 85 MA's), (22, 8148), (65, 8376), (70, 8397), (71, 8400), (94, 8505), (109, 8574), (115, 8598), (117, 8607), (119, 8613), (129, 8661), (152, 8751), (153, 8754), (182, 8889), (190, 8937),

Gene: EMSquaredA_14 Start: 8717, Stop: 9562, Start Num: 14

Candidate Starts for EMSquaredA_14:

(Start: 14 @8717 has 85 MA's), (29, 8786), (31, 8798), (83, 9062), (92, 9107), (94, 9116), (113, 9203), (124, 9257),

Gene: Eden_11 Start: 8192, Stop: 8782, Start Num: 63

Candidate Starts for Eden_11:

(35, 8039), (38, 8051), (46, 8078), (Start: 63 @8192 has 138 MA's), (69, 8213), (73, 8240), (94, 8336), (96, 8351), (134, 8543), (154, 8621), (155, 8624), (157, 8630), (171, 8699),

Gene: Eesa_13 Start: 8964, Stop: 9548, Start Num: 63

Candidate Starts for Eesa_13:

(Start: 63 @8964 has 138 MA's), (124, 9273), (166, 9432), (178, 9501), (179, 9513),

Gene: ElJefes_12 Start: 8178, Stop: 9014, Start Num: 14

Candidate Starts for ElJefes_12:

(2, 7959), (4, 8016), (6, 8064), (8, 8124), (Start: 14 @8178 has 85 MA's), (22, 8211), (54, 8397), (68, 8457), (70, 8469), (115, 8670), (117, 8679), (119, 8685), (124, 8718), (131, 8748), (143, 8793), (181, 8955),

Gene: Elinal_14 Start: 7707, Stop: 8546, Start Num: 14

Candidate Starts for Elinal_14:

(6, 7593), (8, 7653), (Start: 14 @7707 has 85 MA's), (22, 7740), (54, 7926), (68, 7986), (70, 7998), (94, 8106), (115, 8199), (117, 8208), (119, 8214), (124, 8247), (131, 8277), (143, 8322), (167, 8412),

Gene: Eliott_13 Start: 7939, Stop: 8781, Start Num: 14

Candidate Starts for Eliott_13:

(Start: 14 @7939 has 85 MA's), (22, 7972), (54, 8158), (70, 8230), (92, 8329), (115, 8431), (117, 8440), (119, 8446), (124, 8479), (134, 8515), (137, 8524), (180, 8710), (181, 8716),

Gene: Elva_13 Start: 8634, Stop: 9431, Start Num: 63

Candidate Starts for Elva_13:

(Start: 63 @8634 has 138 MA's), (65, 8640), (80, 8718), (94, 8784), (96, 8799), (126, 8958), (134, 8991), (145, 9036), (157, 9078), (192, 9276), (196, 9384),

Gene: Emalyn_12 Start: 7661, Stop: 8509, Start Num: 14

Candidate Starts for Emalyn_12:

(8, 7604), (Start: 14 @7661 has 85 MA's), (22, 7694), (54, 7880), (70, 7952), (106, 8117), (115, 8153), (117, 8162), (119, 8168), (124, 8201), (134, 8237), (137, 8246), (180, 8432), (181, 8438),

Gene: EnalisNailo_14 Start: 8717, Stop: 9562, Start Num: 14

Candidate Starts for EnalisNailo_14:

(Start: 14 @8717 has 85 MA's), (31, 8798), (92, 9107), (94, 9116), (124, 9257), (151, 9374), (159, 9398), (169, 9449),

Gene: Eula_12 Start: 8321, Stop: 9118, Start Num: 63

Candidate Starts for Eula_12:

(29, 8135), (59, 8291), (Start: 63 @8321 has 138 MA's), (65, 8327), (94, 8468), (96, 8483), (134, 8675), (145, 8720), (157, 8762), (192, 8963),

Gene: Feastonyeet_12 Start: 7726, Stop: 8565, Start Num: 14

Candidate Starts for Feastonyeet_12:

(6, 7612), (8, 7672), (Start: 14 @7726 has 85 MA's), (22, 7759), (54, 7945), (68, 8005), (70, 8017), (115, 8218), (117, 8227), (119, 8233), (124, 8266), (131, 8296), (143, 8341),

Gene: Finalfrontier_13 Start: 8833, Stop: 9630, Start Num: 63

Candidate Starts for Finalfrontier_13:

(26, 8629), (29, 8647), (59, 8803), (Start: 63 @8833 has 138 MA's), (65, 8839), (94, 8980), (96, 8995), (134, 9187), (157, 9274), (192, 9475),

Gene: Fingolfin_12 Start: 8379, Stop: 8960, Start Num: 63

Candidate Starts for Fingolfin_12:

(Start: 63 @8379 has 138 MA's), (69, 8400), (124, 8688), (145, 8772), (156, 8811), (157, 8814), (166, 8847), (178, 8916), (185, 8946),

Gene: FlameThrower_12 Start: 8288, Stop: 8878, Start Num: 63

Candidate Starts for FlameThrower_12:

(Start: 63 @8288 has 138 MA's), (65, 8294), (69, 8309), (73, 8336), (90, 8414), (94, 8432), (96, 8447), (124, 8600), (134, 8639), (136, 8645), (145, 8684), (156, 8723), (163, 8744),

Gene: Floral_14 Start: 8717, Stop: 9562, Start Num: 14

Candidate Starts for Floral_14:

(Start: 14 @8717 has 85 MA's), (29, 8786), (31, 8798), (83, 9062), (92, 9107), (94, 9116), (113, 9203), (124, 9257),

Gene: Franklin22_11 Start: 8165, Stop: 8755, Start Num: 63

Candidate Starts for Franklin22_11:

(41, 8033), (Start: 63 @8165 has 138 MA's), (65, 8171), (69, 8186), (87, 8276), (94, 8309), (96, 8324), (124, 8477), (134, 8516), (153, 8591), (155, 8597), (157, 8603),

Gene: Fribs8_14 Start: 8691, Stop: 9530, Start Num: 14

Candidate Starts for Fribs8_14:

(Start: 14 @8691 has 85 MA's), (22, 8724), (43, 8817), (65, 8952), (75, 9003), (94, 9081), (109, 9150), (115, 9174), (117, 9183), (119, 9189), (129, 9237), (153, 9330), (182, 9465), (186, 9483), (190, 9513),

Gene: Frizzle_11 Start: 7439, Stop: 8287, Start Num: 16

Candidate Starts for Frizzle_11:

(Start: 16 @7439 has 4 MA's), (25, 7493), (33, 7535), (34, 7538), (48, 7586), (67, 7703), (77, 7763), (106, 7910), (111, 7931), (117, 7952), (143, 8087), (168, 8189), (177, 8228), (179, 8246),

Gene: GTE2_11 Start: 7614, Stop: 8459, Start Num: 14

Candidate Starts for GTE2_11:

(2, 7392), (3, 7428), (4, 7449), (6, 7497), (8, 7557), (Start: 14 @7614 has 85 MA's), (22, 7647), (54, 7833), (70, 7905), (115, 8106), (119, 8121), (124, 8154), (134, 8190), (137, 8199), (143, 8229), (180, 8385), (181, 8391),

Gene: Gack_11 Start: 8231, Stop: 8821, Start Num: 63

Candidate Starts for Gack_11:

(41, 8099), (Start: 63 @8231 has 138 MA's), (65, 8237), (69, 8252), (94, 8375), (96, 8390), (124, 8543), (126, 8549), (134, 8582), (155, 8663), (183, 8801),

Gene: Galaxy_13 Start: 8808, Stop: 9638, Start Num: 63

Candidate Starts for Galaxy_13:

(Start: 63 @8808 has 138 MA's), (124, 9117), (141, 9183), (156, 9240), (166, 9276), (171, 9312), (178, 9345), (187, 9399), (192, 9444), (193, 9498), (194, 9519),

Gene: Ghobes_11 Start: 7439, Stop: 8287, Start Num: 16

Candidate Starts for Ghobes_11:

(Start: 16 @7439 has 4 MA's), (25, 7493), (33, 7535), (34, 7538), (48, 7586), (67, 7703), (77, 7763), (106, 7910), (111, 7931), (117, 7952), (143, 8087), (168, 8189), (177, 8228), (179, 8246),

Gene: GiKK_16 Start: 8250, Stop: 9098, Start Num: 14

Candidate Starts for GiKK_16:

(Start: 14 @8250 has 85 MA's), (22, 8283), (42, 8379), (54, 8469), (70, 8541), (75, 8571), (109, 8727), (110, 8733), (115, 8751), (119, 8766), (134, 8835), (160, 8928), (163, 8937),

Gene: Gibbous_13 Start: 8115, Stop: 8954, Start Num: 14

Candidate Starts for Gibbous_13:

(Start: 14 @8115 has 85 MA's), (22, 8148), (65, 8376), (70, 8397), (71, 8400), (94, 8505), (109, 8574), (115, 8598), (117, 8607), (119, 8613), (129, 8661), (152, 8751), (153, 8754), (182, 8889), (190, 8937),

Gene: Gilgamesh_64 Start: 56918, Stop: 57751, Start Num: 18

Candidate Starts for Gilgamesh_64:

(Start: 18 @56918 has 1 MA's), (27, 56972), (39, 57023), (74, 57206), (96, 57311), (103, 57350), (105, 57365), (106, 57371), (155, 57596), (173, 57674),

Gene: Glotell_12 Start: 8378, Stop: 8959, Start Num: 63

Candidate Starts for Glotell_12:

(Start: 63 @8378 has 138 MA's), (69, 8399), (124, 8687), (145, 8771), (156, 8810), (157, 8813), (166, 8846), (178, 8915), (185, 8945),

Gene: GoldHunter_13 Start: 7940, Stop: 8782, Start Num: 14

Candidate Starts for GoldHunter_13:

(Start: 14 @7940 has 85 MA's), (22, 7973), (54, 8159), (70, 8231), (92, 8330), (115, 8432), (117, 8441), (119, 8447), (124, 8480), (134, 8516), (137, 8525), (180, 8711), (181, 8717),

Gene: GramZayde_13 Start: 8803, Stop: 9384, Start Num: 63

Candidate Starts for GramZayde_13:

(Start: 63 @8803 has 138 MA's), (69, 8824), (86, 8911), (96, 8959), (124, 9112), (145, 9196), (155, 9232), (157, 9238), (166, 9271), (178, 9340),

Gene: Gravel_14 Start: 8960, Stop: 9544, Start Num: 63

Candidate Starts for Gravel_14:

(Start: 63 @8960 has 138 MA's), (166, 9428), (178, 9497), (179, 9509),

Gene: Grist_12 Start: 8371, Stop: 9165, Start Num: 63

Candidate Starts for Grist_12:

(Start: 63 @8371 has 138 MA's), (94, 8518), (96, 8533), (134, 8725), (145, 8770), (157, 8812), (192, 9010),

Gene: HamCheese_12 Start: 8378, Stop: 8959, Start Num: 63

Candidate Starts for HamCheese_12:

(Start: 63 @8378 has 138 MA's), (69, 8399), (124, 8687), (145, 8771), (156, 8810), (157, 8813), (166, 8846), (178, 8915), (185, 8945),

Gene: HannahPhantana_14 Start: 8967, Stop: 9548, Start Num: 63

Candidate Starts for HannahPhantana_14:

(Start: 63 @8967 has 138 MA's), (69, 8988), (86, 9075), (96, 9123), (124, 9276), (145, 9360), (155, 9396), (157, 9402), (166, 9435), (178, 9504),

Gene: Hexbug_15 Start: 8936, Stop: 9784, Start Num: 14

Candidate Starts for Hexbug_15:

(Start: 14 @8936 has 85 MA's), (22, 8969), (37, 9047), (45, 9077), (54, 9155), (70, 9227), (84, 9296), (87, 9311), (106, 9401), (109, 9413), (115, 9437), (119, 9452), (134, 9521), (143, 9560), (163, 9623), (182, 9728),

Gene: HippoPololi_15 Start: 8768, Stop: 9607, Start Num: 14

Candidate Starts for HippoPololi_15:

(Start: 14 @8768 has 85 MA's), (22, 8801), (43, 8894), (65, 9029), (94, 9158), (109, 9227), (115, 9251), (117, 9260), (119, 9266), (129, 9314), (153, 9407), (182, 9542), (190, 9590),

Gene: Horseradish_14 Start: 7821, Stop: 8666, Start Num: 14

Candidate Starts for Horseradish_14:

(Start: 14 @7821 has 85 MA's), (22, 7854), (54, 8040), (70, 8112), (115, 8313), (119, 8328), (124, 8361), (137, 8406), (180, 8592), (181, 8598),

Gene: Ibantik_76 Start: 35791, Stop: 36390, Start Num: 62

Candidate Starts for Ibantik_76:

(Start: 62 @35791 has 7 MA's), (72, 35836), (94, 35935), (109, 36022), (146, 36205), (161, 36256), (175, 36328), (184, 36373),

Gene: Icarian_13 Start: 8561, Stop: 9358, Start Num: 63

Candidate Starts for Icarian_13:

(Start: 63 @8561 has 138 MA's), (65, 8567), (80, 8645), (94, 8711), (96, 8726), (134, 8918), (145, 8963), (192, 9203),

Gene: IndyLu_12 Start: 8371, Stop: 9165, Start Num: 63

Candidate Starts for IndyLu_12:

(Start: 63 @8371 has 138 MA's), (94, 8518), (96, 8533), (134, 8725), (145, 8770), (157, 8812), (192, 9010),

Gene: Jabb_12 Start: 8360, Stop: 9157, Start Num: 63

Candidate Starts for Jabb_12:

(26, 8156), (29, 8174), (59, 8330), (Start: 63 @8360 has 138 MA's), (65, 8366), (94, 8507), (96, 8522), (134, 8714), (157, 8801), (192, 9002),

Gene: Jablanski_14 Start: 8564, Stop: 9409, Start Num: 14

Candidate Starts for Jablanski_14:

(Start: 14 @8564 has 85 MA's), (29, 8633), (31, 8645), (83, 8909), (92, 8954), (94, 8963), (124, 9104),

Gene: Jamun_13 Start: 9149, Stop: 9979, Start Num: 63

Candidate Starts for Jamun_13:

(Start: 63 @9149 has 138 MA's), (124, 9458), (141, 9524), (156, 9581), (171, 9653), (178, 9686), (187, 9740), (192, 9785), (194, 9860),

Gene: Jamzy_16 Start: 8260, Stop: 9108, Start Num: 14

Candidate Starts for Jamzy_16:

(Start: 14 @8260 has 85 MA's), (22, 8293), (42, 8389), (54, 8479), (84, 8620), (106, 8725), (109, 8737), (110, 8743), (115, 8761), (117, 8770), (119, 8776), (134, 8845), (140, 8869), (160, 8938), (163, 8947), (182, 9052),

Gene: Jerole_14 Start: 8964, Stop: 9545, Start Num: 63

Candidate Starts for Jerole_14:

(Start: 63 @8964 has 138 MA's), (69, 8985), (86, 9072), (96, 9120), (124, 9273), (145, 9357), (155, 9393), (157, 9399), (166, 9432), (178, 9501),

Gene: Johnathan_12 Start: 8320, Stop: 9117, Start Num: 63

Candidate Starts for Johnathan_12:

(9, 8020), (26, 8116), (29, 8134), (30, 8143), (50, 8236), (59, 8290), (Start: 63 @8320 has 138 MA's), (65, 8326), (94, 8467), (96, 8482), (134, 8674), (157, 8761), (192, 8962), (195, 9058),

Gene: Jovita_12 Start: 8422, Stop: 9219, Start Num: 63

Candidate Starts for Jovita_12:

(26, 8218), (29, 8236), (59, 8392), (Start: 63 @8422 has 138 MA's), (65, 8428), (94, 8569), (96, 8584), (134, 8776), (145, 8821), (157, 8863), (192, 9064),

Gene: Juicebox_14 Start: 9288, Stop: 10136, Start Num: 17

Candidate Starts for Juicebox_14:

(Start: 17 @9288 has 1 MA's), (65, 9543), (89, 9648), (124, 9822), (139, 9879),

Gene: Juno112_12 Start: 8379, Stop: 8960, Start Num: 63

Candidate Starts for Juno112_12:

(Start: 63 @8379 has 138 MA's), (69, 8400), (124, 8688), (145, 8772), (156, 8811), (157, 8814), (166, 8847), (178, 8916), (185, 8946),

Gene: KHumphrey_12 Start: 8378, Stop: 8959, Start Num: 63

Candidate Starts for KHumphrey_12:

(Start: 63 @8378 has 138 MA's), (69, 8399), (124, 8687), (145, 8771), (156, 8810), (157, 8813), (166, 8846), (178, 8915), (185, 8945),

Gene: Kamdara_12 Start: 8555, Stop: 9349, Start Num: 63

Candidate Starts for Kamdara_12:

(Start: 63 @8555 has 138 MA's), (65, 8561), (78, 8630), (94, 8702), (96, 8717), (134, 8909), (145, 8954), (157, 8996), (162, 9011), (183, 9128), (192, 9194), (196, 9302),

Gene: Kate33_12 Start: 8370, Stop: 9164, Start Num: 63

Candidate Starts for Kate33_12:

(Start: 63 @8370 has 138 MA's), (94, 8517), (96, 8532), (134, 8724), (145, 8769), (157, 8811), (192, 9009),

Gene: Katzastrophic_12 Start: 8463, Stop: 9053, Start Num: 63

Candidate Starts for Katzastrophic_12:

(Start: 63 @8463 has 138 MA's), (65, 8469), (69, 8484), (73, 8511), (90, 8589), (94, 8607), (96, 8622), (124, 8775), (134, 8814), (136, 8820), (145, 8859), (156, 8898), (163, 8919),

Gene: KayGee_13 Start: 7707, Stop: 8546, Start Num: 14

Candidate Starts for KayGee_13:

(6, 7593), (8, 7653), (Start: 14 @7707 has 85 MA's), (22, 7740), (54, 7926), (68, 7986), (70, 7998), (94, 8106), (115, 8199), (117, 8208), (119, 8214), (124, 8247), (131, 8277), (143, 8322), (167, 8412),

Gene: KendraB23_14 Start: 8961, Stop: 9545, Start Num: 63

Candidate Starts for KendraB23_14:

(Start: 63 @8961 has 138 MA's), (166, 9429), (178, 9498), (179, 9510),

Gene: Kenzers_12 Start: 8337, Stop: 9134, Start Num: 63

Candidate Starts for Kenzers_12:

(24, 8130), (26, 8133), (29, 8151), (50, 8253), (59, 8307), (Start: 63 @8337 has 138 MA's), (65, 8343), (94, 8484), (96, 8499), (134, 8691), (157, 8778), (192, 8979), (195, 9075),

Gene: Kepler_13 Start: 8802, Stop: 9383, Start Num: 63

Candidate Starts for Kepler_13:

(Start: 63 @8802 has 138 MA's), (69, 8823), (86, 8910), (96, 8958), (124, 9111), (145, 9195), (155, 9231), (157, 9237), (166, 9270), (178, 9339),

Gene: Khuang_11 Start: 7492, Stop: 8307, Start Num: 15

Candidate Starts for Khuang_11:

(10, 7468), (Start: 12 @7480 has 1 MA's), (Start: 15 @7492 has 3 MA's), (21, 7519), (52, 7702), (64, 7756), (81, 7831), (104, 7942), (116, 7987), (144, 8119), (155, 8158), (169, 8224),

Gene: Kieran_12 Start: 8559, Stop: 9353, Start Num: 63

Candidate Starts for Kieran_12:

(Start: 63 @8559 has 138 MA's), (65, 8565), (78, 8634), (94, 8706), (96, 8721), (134, 8913), (145, 8958), (157, 9000), (162, 9015), (183, 9132), (192, 9198), (196, 9306),

Gene: Kromp_14 Start: 9809, Stop: 10375, Start Num: 62

Candidate Starts for Kromp_14:

(1, 9206), (5, 9401), (Start: 62 @9809 has 7 MA's), (82, 9893), (94, 9935), (96, 9950), (97, 9956), (112, 10037), (128, 10115), (133, 10130), (172, 10292),

Gene: Kuleana_13 Start: 8760, Stop: 9341, Start Num: 63

Candidate Starts for Kuleana_13:

(Start: 63 @8760 has 138 MA's), (69, 8781), (91, 8886), (96, 8916), (124, 9069), (145, 9153), (156, 9192), (166, 9228), (173, 9270), (178, 9297),

Gene: Lahqtemish_12 Start: 8417, Stop: 9211, Start Num: 63

Candidate Starts for Lahqtemish_12:

(Start: 63 @8417 has 138 MA's), (94, 8564), (96, 8579), (134, 8771), (145, 8816), (157, 8858), (192, 9056),

Gene: Laphuphu24k_12 Start: 8378, Stop: 8959, Start Num: 63

Candidate Starts for Laphuphu24k_12:

(Start: 63 @8378 has 138 MA's), (69, 8399), (124, 8687), (145, 8771), (156, 8810), (157, 8813), (166, 8846), (178, 8915), (185, 8945),

Gene: Lauer_12 Start: 7756, Stop: 8595, Start Num: 14

Candidate Starts for Lauer_12:

(6, 7642), (8, 7702), (Start: 14 @7756 has 85 MA's), (22, 7789), (54, 7975), (68, 8035), (70, 8047), (115, 8248), (117, 8257), (119, 8263), (124, 8296), (131, 8326), (143, 8371), (167, 8461),

Gene: Leona_12 Start: 8429, Stop: 9010, Start Num: 63

Candidate Starts for Leona_12:

(Start: 63 @8429 has 138 MA's), (69, 8450), (124, 8738), (145, 8822), (156, 8861), (157, 8864), (166, 8897), (178, 8966), (185, 8996),

Gene: LilSpotty_12 Start: 7545, Stop: 8324, Start Num: 15

Candidate Starts for LilSpotty_12:

(Start: 15 @7545 has 3 MA's), (32, 7632), (47, 7683), (57, 7761), (Start: 63 @7797 has 138 MA's), (70, 7824), (75, 7854), (76, 7860), (83, 7893), (90, 7929), (92, 7938), (108, 8034), (117, 8070), (124, 8109), (149, 8196), (174, 8304),

Gene: Lilas_14 Start: 8717, Stop: 9562, Start Num: 14

Candidate Starts for Lilas_14:

(Start: 14 @8717 has 85 MA's), (31, 8798), (92, 9107), (94, 9116), (124, 9257), (151, 9374), (159, 9398), (169, 9449),

Gene: Lilo27_12 Start: 8297, Stop: 9094, Start Num: 63

Candidate Starts for Lilo27_12:

(24, 8090), (26, 8093), (29, 8111), (30, 8120), (59, 8267), (Start: 63 @8297 has 138 MA's), (65, 8303), (94, 8444), (96, 8459), (125, 8615), (134, 8651), (145, 8696), (157, 8738), (192, 8939),

Gene: LimaBean_12 Start: 8320, Stop: 9117, Start Num: 63

Candidate Starts for LimaBean_12:

(9, 8020), (26, 8116), (29, 8134), (50, 8236), (59, 8290), (Start: 63 @8320 has 138 MA's), (65, 8326), (94, 8467), (96, 8482), (134, 8674), (157, 8761), (192, 8962), (195, 9058),

Gene: LittleTokyo_13 Start: 8714, Stop: 9298, Start Num: 63

Candidate Starts for LittleTokyo_13:

(Start: 63 @8714 has 138 MA's), (69, 8735), (87, 8825), (124, 9023), (145, 9107), (156, 9146), (166, 9182), (169, 9209), (173, 9224), (185, 9281),

Gene: LonelyBoi_14 Start: 8564, Stop: 9409, Start Num: 14

Candidate Starts for LonelyBoi_14:

(Start: 14 @8564 has 85 MA's), (31, 8645), (92, 8954), (94, 8963), (113, 9050), (124, 9104),

Gene: Loviatar_12 Start: 8640, Stop: 9437, Start Num: 63

Candidate Starts for Loviatar_12:

(Start: 63 @8640 has 138 MA's), (65, 8646), (80, 8724), (94, 8790), (96, 8805), (126, 8964), (134, 8997), (145, 9042), (192, 9282),

Gene: Lunar_14 Start: 8964, Stop: 9545, Start Num: 63

Candidate Starts for Lunar_14:

(Start: 63 @8964 has 138 MA's), (69, 8985), (86, 9072), (96, 9120), (124, 9273), (145, 9357), (155, 9393), (157, 9399), (166, 9432), (178, 9501),

Gene: Lynlen_12 Start: 8337, Stop: 9134, Start Num: 63

Candidate Starts for Lynlen_12:

(24, 8130), (26, 8133), (29, 8151), (50, 8253), (59, 8307), (Start: 63 @8337 has 138 MA's), (65, 8343), (94, 8484), (96, 8499), (134, 8691), (157, 8778), (192, 8979), (195, 9075),

Gene: MAnor_13 Start: 7697, Stop: 8536, Start Num: 14

Candidate Starts for MAnor_13:

(6, 7583), (8, 7643), (Start: 14 @7697 has 85 MA's), (22, 7730), (54, 7916), (61, 7952), (68, 7976), (70, 7988), (115, 8189), (117, 8198), (119, 8204), (124, 8237), (131, 8267), (143, 8312), (181, 8474),

Gene: MScarn_15 Start: 7910, Stop: 8755, Start Num: 14

Candidate Starts for MScarn_15:

(6, 7793), (8, 7853), (Start: 14 @7910 has 85 MA's), (22, 7943), (54, 8129), (70, 8201), (115, 8402), (119, 8417), (124, 8450), (137, 8495), (180, 8681), (181, 8687),

Gene: MaVan_15 Start: 8878, Stop: 9717, Start Num: 14

Candidate Starts for MaVan_15:

(Start: 14 @8878 has 85 MA's), (22, 8911), (65, 9139), (84, 9220), (94, 9268), (106, 9325), (109, 9337), (115, 9361), (119, 9376), (140, 9469), (150, 9502), (152, 9514), (153, 9517), (182, 9652), (190, 9700),

Gene: Malvina_15 Start: 8771, Stop: 9610, Start Num: 14

Candidate Starts for Malvina_15:

(Start: 14 @8771 has 85 MA's), (22, 8804), (43, 8897), (65, 9032), (94, 9161), (109, 9230), (115, 9254), (117, 9263), (119, 9269), (129, 9317), (153, 9410), (182, 9545), (190, 9593),

Gene: Margaret_16 Start: 8645, Stop: 9493, Start Num: 14

Candidate Starts for Margaret_16:

(Start: 14 @8645 has 85 MA's), (22, 8678), (54, 8864), (87, 9020), (106, 9110), (109, 9122), (115, 9146), (119, 9161), (134, 9230), (140, 9254), (160, 9323), (163, 9332), (189, 9476),

Gene: Marteenaa_14 Start: 8717, Stop: 9562, Start Num: 14

Candidate Starts for Marteena_14:

(Start: 14 @8717 has 85 MA's), (29, 8786), (31, 8798), (83, 9062), (92, 9107), (94, 9116), (113, 9203), (124, 9257),

Gene: Mayweather_14 Start: 8330, Stop: 9166, Start Num: 14

Candidate Starts for Mayweather_14:

(2, 8111), (4, 8168), (6, 8216), (8, 8276), (Start: 14 @8330 has 85 MA's), (22, 8363), (54, 8549), (68, 8609), (115, 8822), (117, 8831), (119, 8837), (124, 8870), (131, 8900), (143, 8945), (181, 9107),

Gene: McDazzle_12 Start: 8172, Stop: 9008, Start Num: 14

Candidate Starts for McDazzle_12:

(2, 7953), (4, 8010), (6, 8058), (8, 8118), (Start: 14 @8172 has 85 MA's), (22, 8205), (54, 8391), (68, 8451), (70, 8463), (115, 8664), (117, 8673), (119, 8679), (124, 8712), (131, 8742), (143, 8787), (181, 8949),

Gene: Melons_14 Start: 8964, Stop: 9545, Start Num: 63

Candidate Starts for Melons_14:

(Start: 63 @8964 has 138 MA's), (69, 8985), (86, 9072), (96, 9120), (124, 9273), (145, 9357), (155, 9393), (157, 9399), (166, 9432), (178, 9501),

Gene: Milomuff_13 Start: 8706, Stop: 9503, Start Num: 63

Candidate Starts for Milomuff_13:

(26, 8502), (29, 8520), (50, 8622), (59, 8676), (Start: 63 @8706 has 138 MA's), (65, 8712), (94, 8853), (96, 8868), (134, 9060), (157, 9147), (192, 9348), (195, 9444),

Gene: MsUbiquitous_12 Start: 8360, Stop: 9157, Start Num: 63

Candidate Starts for MsUbiquitous_12:

(26, 8156), (29, 8174), (59, 8330), (Start: 63 @8360 has 138 MA's), (65, 8366), (94, 8507), (96, 8522), (134, 8714), (157, 8801), (192, 9002),

Gene: MunkgeeRoachy_13 Start: 7987, Stop: 8829, Start Num: 14

Candidate Starts for MunkgeeRoachy_13:

(Start: 14 @7987 has 85 MA's), (22, 8020), (54, 8206), (70, 8278), (92, 8377), (115, 8479), (117, 8488), (119, 8494), (124, 8527), (134, 8563), (137, 8572), (180, 8758), (181, 8764),

Gene: Nibbles_15 Start: 8878, Stop: 9717, Start Num: 14

Candidate Starts for Nibbles_15:

(Start: 14 @8878 has 85 MA's), (22, 8911), (65, 9139), (84, 9220), (94, 9268), (106, 9325), (109, 9337), (115, 9361), (119, 9376), (140, 9469), (150, 9502), (152, 9514), (153, 9517), (182, 9652), (190, 9700),

Gene: Niblet_13 Start: 8750, Stop: 9334, Start Num: 63

Candidate Starts for Niblet_13:

(Start: 63 @8750 has 138 MA's), (124, 9059), (157, 9185), (166, 9218), (178, 9287), (179, 9299),

Gene: Nicky22_13 Start: 8768, Stop: 9565, Start Num: 63

Candidate Starts for Nicky22_13:

(26, 8564), (29, 8582), (59, 8738), (Start: 63 @8768 has 138 MA's), (65, 8774), (94, 8915), (96, 8930), (125, 9086), (134, 9122), (145, 9167), (192, 9410),

Gene: Nina_14 Start: 8973, Stop: 9815, Start Num: 14

Candidate Starts for Nina_14:

(Start: 14 @8973 has 85 MA's), (22, 9006), (70, 9264), (92, 9363), (115, 9465), (117, 9474), (119, 9480), (124, 9513), (134, 9549), (137, 9558), (180, 9744), (181, 9750),

Gene: Nodigi_15 Start: 8929, Stop: 9777, Start Num: 14

Candidate Starts for Nodigi_15:

(Start: 14 @8929 has 85 MA's), (22, 8962), (45, 9070), (54, 9148), (70, 9220), (87, 9304), (106, 9394), (109, 9406), (115, 9430), (119, 9445), (134, 9514), (143, 9553), (163, 9616), (182, 9721),

Gene: Olliecat_12 Start: 8550, Stop: 9137, Start Num: 63

Candidate Starts for Olliecat_12:

(Start: 63 @8550 has 138 MA's), (70, 8577), (94, 8691), (134, 8898), (142, 8931), (153, 8973), (154, 8976), (157, 8985),

Gene: Oppalora_12 Start: 8378, Stop: 8959, Start Num: 63

Candidate Starts for Oppalora_12:

(Start: 63 @8378 has 138 MA's), (69, 8399), (124, 8687), (145, 8771), (156, 8810), (157, 8813), (166, 8846), (178, 8915), (185, 8945),

Gene: Orcanus_13 Start: 8754, Stop: 9338, Start Num: 63

Candidate Starts for Orcanus_13:

(Start: 63 @8754 has 138 MA's), (166, 9222), (178, 9291), (179, 9303),

Gene: Orla_15 Start: 8933, Stop: 9781, Start Num: 14

Candidate Starts for Orla_15:

(Start: 14 @8933 has 85 MA's), (22, 8966), (45, 9074), (54, 9152), (70, 9224), (87, 9308), (106, 9398), (109, 9410), (115, 9434), (119, 9449), (134, 9518), (143, 9557), (163, 9620), (182, 9725),

Gene: OtsoOtso_13 Start: 8803, Stop: 9384, Start Num: 63

Candidate Starts for OtsoOtso_13:

(Start: 63 @8803 has 138 MA's), (69, 8824), (86, 8911), (96, 8959), (124, 9112), (145, 9196), (155, 9232), (157, 9238), (166, 9271), (178, 9340),

Gene: P3MA_13 Start: 8229, Stop: 9089, Start Num: 13

Candidate Starts for P3MA_13:

(Start: 13 @8229 has 1 MA's), (55, 8448), (58, 8457), (70, 8517), (71, 8520), (75, 8547), (85, 8595), (88, 8610), (93, 8634), (94, 8640), (98, 8655), (120, 8754), (123, 8766), (127, 8799), (136, 8832), (146, 8874), (147, 8877), (164, 8937), (179, 9021), (181, 9030), (188, 9066),

Gene: PastaFagioli_12 Start: 8405, Stop: 9199, Start Num: 63

Candidate Starts for PastaFagioli_12:

(Start: 63 @8405 has 138 MA's), (94, 8552), (96, 8567), (134, 8759), (145, 8804), (157, 8846), (192, 9044),

Gene: Pecas_12 Start: 8321, Stop: 9118, Start Num: 63

Candidate Starts for Pecas_12:

(29, 8135), (59, 8291), (Start: 63 @8321 has 138 MA's), (65, 8327), (94, 8468), (96, 8483), (134, 8675), (145, 8720), (157, 8762), (192, 8963),

Gene: Pelletreau_14 Start: 8960, Stop: 9544, Start Num: 63

Candidate Starts for Pelletreau_14:

(Start: 63 @8960 has 138 MA's), (166, 9428), (178, 9497), (179, 9509),

Gene: PhigPhack_12 Start: 8349, Stop: 9146, Start Num: 63

Candidate Starts for PhigPhack_12:

(26, 8145), (29, 8163), (50, 8265), (59, 8319), (Start: 63 @8349 has 138 MA's), (65, 8355), (94, 8496), (96, 8511), (134, 8703), (157, 8790), (192, 8991), (195, 9087),

Gene: PhirstandPhine_14 Start: 8964, Stop: 9545, Start Num: 63

Candidate Starts for PhirstandPhine_14:

(Start: 63 @8964 has 138 MA's), (69, 8985), (86, 9072), (96, 9120), (124, 9273), (145, 9357), (155, 9393), (157, 9399), (166, 9432), (178, 9501),

Gene: Phisb_12 Start: 8314, Stop: 9111, Start Num: 63

Candidate Starts for Phisb_12:

(11, 8026), (24, 8107), (26, 8110), (29, 8128), (59, 8284), (Start: 63 @8314 has 138 MA's), (65, 8320), (94, 8461), (96, 8476), (125, 8632), (134, 8668), (145, 8713), (157, 8755), (192, 8956),

Gene: PhluffyCoco_12 Start: 8378, Stop: 8959, Start Num: 63

Candidate Starts for PhluffyCoco_12:

(Start: 63 @8378 has 138 MA's), (69, 8399), (124, 8687), (145, 8771), (156, 8810), (157, 8813), (166, 8846), (178, 8915), (185, 8945),

Gene: Pineda_14 Start: 8964, Stop: 9545, Start Num: 63

Candidate Starts for Pineda_14:

(Start: 63 @8964 has 138 MA's), (69, 8985), (86, 9072), (96, 9120), (124, 9273), (145, 9357), (155, 9393), (157, 9399), (166, 9432), (178, 9501),

Gene: Polka_13 Start: 8803, Stop: 9384, Start Num: 63

Candidate Starts for Polka_13:

(Start: 63 @8803 has 138 MA's), (69, 8824), (86, 8911), (96, 8959), (124, 9112), (145, 9196), (155, 9232), (157, 9238), (166, 9271), (178, 9340),

Gene: Pollux_14 Start: 8717, Stop: 9562, Start Num: 14

Candidate Starts for Pollux_14:

(Start: 14 @8717 has 85 MA's), (29, 8786), (31, 8798), (83, 9062), (92, 9107), (94, 9116), (113, 9203), (124, 9257),

Gene: PondAmelia_13 Start: 8569, Stop: 9366, Start Num: 63

Candidate Starts for PondAmelia_13:

(Start: 63 @8569 has 138 MA's), (65, 8575), (80, 8653), (94, 8719), (126, 8893), (134, 8926), (145, 8971), (157, 9013), (192, 9211),

Gene: Pons_13 Start: 7709, Stop: 8545, Start Num: 14

Candidate Starts for Pons_13:

(2, 7490), (4, 7547), (6, 7595), (8, 7655), (Start: 14 @7709 has 85 MA's), (22, 7742), (54, 7928), (68, 7988), (70, 8000), (115, 8201), (117, 8210), (119, 8216), (124, 8249), (131, 8279), (143, 8324), (181, 8486),

Gene: Ponzi_51 Start: 29147, Stop: 29737, Start Num: 62

Candidate Starts for Ponzi_51:

(56, 29111), (Start: 62 @29147 has 7 MA's), (96, 29300), (100, 29318), (109, 29372), (118, 29408), (146, 29546), (161, 29597), (184, 29714),

Gene: Posh_14 Start: 8717, Stop: 9562, Start Num: 14

Candidate Starts for Posh_14:

(Start: 14 @8717 has 85 MA's), (29, 8786), (31, 8798), (83, 9062), (92, 9107), (94, 9116), (113, 9203), (124, 9257),

Gene: PotPie_13 Start: 8560, Stop: 9399, Start Num: 14

Candidate Starts for PotPie_13:

(6, 8446), (8, 8506), (Start: 14 @8560 has 85 MA's), (22, 8593), (54, 8779), (68, 8839), (70, 8851), (115, 9052), (117, 9061), (119, 9067), (124, 9100), (131, 9130), (143, 9175), (167, 9265),

Gene: PsychoKiller_13 Start: 7939, Stop: 8781, Start Num: 14

Candidate Starts for PsychoKiller_13:

(Start: 14 @7939 has 85 MA's), (22, 7972), (54, 8158), (70, 8230), (92, 8329), (115, 8431), (117, 8440), (119, 8446), (124, 8479), (134, 8515), (137, 8524), (180, 8710), (181, 8716),

Gene: Pytheas_14 Start: 8564, Stop: 9409, Start Num: 14

Candidate Starts for Pytheas_14:

(Start: 14 @8564 has 85 MA's), (29, 8633), (31, 8645), (83, 8909), (92, 8954), (94, 8963), (124, 9104),

Gene: QMacho_13 Start: 8804, Stop: 9601, Start Num: 63

Candidate Starts for QMacho_13:

(29, 8618), (50, 8720), (59, 8774), (Start: 63 @8804 has 138 MA's), (65, 8810), (94, 8951), (96, 8966), (134, 9158), (145, 9203), (157, 9245), (192, 9446),

Gene: Quasar_13 Start: 8548, Stop: 9390, Start Num: 14

Candidate Starts for Quasar_13:

(Start: 14 @8548 has 85 MA's), (22, 8581), (70, 8839), (92, 8938), (115, 9040), (117, 9049), (119, 9055), (124, 9088), (134, 9124), (137, 9133), (180, 9319), (181, 9325),

Gene: Quenya_13 Start: 8462, Stop: 9052, Start Num: 63

Candidate Starts for Quenya_13:

(Start: 63 @8462 has 138 MA's), (65, 8468), (69, 8483), (73, 8510), (87, 8573), (94, 8606), (96, 8621), (124, 8774), (134, 8813), (136, 8819), (145, 8858), (148, 8867), (156, 8897), (163, 8918),

Gene: RADical_14 Start: 7940, Stop: 8782, Start Num: 14

Candidate Starts for RADical_14:

(Start: 14 @7940 has 85 MA's), (22, 7973), (54, 8159), (70, 8231), (92, 8330), (115, 8432), (117, 8441), (119, 8447), (124, 8480), (134, 8516), (137, 8525), (180, 8711), (181, 8717),

Gene: RSchmailzl_14 Start: 8080, Stop: 8925, Start Num: 14

Candidate Starts for RSchmailzl_14:

(Start: 14 @8080 has 85 MA's), (22, 8113), (54, 8299), (70, 8371), (92, 8470), (115, 8572), (117, 8581), (119, 8587), (124, 8620), (134, 8656), (137, 8665), (180, 8851), (181, 8857),

Gene: RanchParmCat_16 Start: 8645, Stop: 9493, Start Num: 14

Candidate Starts for RanchParmCat_16:

(Start: 14 @8645 has 85 MA's), (22, 8678), (54, 8864), (106, 9110), (109, 9122), (115, 9146), (119, 9161), (134, 9230), (160, 9323), (163, 9332), (189, 9476),

Gene: Rattail_12 Start: 8429, Stop: 9010, Start Num: 63

Candidate Starts for Rattail_12:

(Start: 63 @8429 has 138 MA's), (69, 8450), (124, 8738), (145, 8822), (156, 8861), (157, 8864), (166, 8897), (178, 8966), (185, 8996),

Gene: RedBaron_15 Start: 7984, Stop: 8826, Start Num: 14

Candidate Starts for RedBaron_15:

(Start: 14 @7984 has 85 MA's), (22, 8017), (54, 8203), (70, 8275), (92, 8374), (115, 8476), (117, 8485), (119, 8491), (124, 8524), (134, 8560), (137, 8569), (180, 8755), (181, 8761),

Gene: RedFox_12 Start: 8378, Stop: 8959, Start Num: 63

Candidate Starts for RedFox_12:

(Start: 63 @8378 has 138 MA's), (69, 8399), (124, 8687), (145, 8771), (156, 8810), (157, 8813), (166, 8846), (178, 8915), (185, 8945),

Gene: Renna12_13 Start: 8581, Stop: 9165, Start Num: 63

Candidate Starts for Renna12_13:

(Start: 63 @8581 has 138 MA's), (69, 8602), (124, 8890), (145, 8974), (156, 9013), (157, 9016), (178, 9118),

Gene: Rollins_11 Start: 8156, Stop: 8740, Start Num: 63

Candidate Starts for Rollins_11:

(Start: 63 @8156 has 138 MA's), (65, 8162), (69, 8177), (70, 8183), (96, 8315), (124, 8468), (126, 8474), (134, 8507), (153, 8582), (155, 8588), (157, 8594),

Gene: Rona_12 Start: 8556, Stop: 9350, Start Num: 63

Candidate Starts for Rona_12:

(Start: 63 @8556 has 138 MA's), (65, 8562), (78, 8631), (94, 8703), (96, 8718), (134, 8910), (145, 8955), (157, 8997), (162, 9012), (183, 9129), (192, 9195), (196, 9303),

Gene: RootBeer_12 Start: 7674, Stop: 8489, Start Num: 15

Candidate Starts for RootBeer_12:

(Start: 15 @7674 has 3 MA's), (64, 7938), (66, 7941), (81, 8013), (91, 8052), (102, 8109), (116, 8169), (144, 8301), (155, 8340), (165, 8376), (169, 8406),

Gene: Ruchi_13 Start: 9071, Stop: 9901, Start Num: 63

Candidate Starts for Ruchi_13:

(Start: 63 @9071 has 138 MA's), (124, 9380), (141, 9446), (156, 9503), (171, 9575), (178, 9608), (187, 9662), (192, 9707), (194, 9782),

Gene: RunningOnE_69 Start: 34517, Stop: 35101, Start Num: 62

Candidate Starts for RunningOnE_69:

(Start: 62 @34517 has 7 MA's), (72, 34562), (94, 34658), (97, 34679), (100, 34691), (127, 34835), (161, 34967), (175, 35039), (184, 35084),

Gene: SanaSana_13 Start: 8569, Stop: 9366, Start Num: 63

Candidate Starts for SanaSana_13:

(Start: 63 @8569 has 138 MA's), (65, 8575), (80, 8653), (94, 8719), (96, 8734), (126, 8893), (134, 8926), (145, 8971), (192, 9211),

Gene: SansAfet_12 Start: 8331, Stop: 9128, Start Num: 63

Candidate Starts for SansAfet_12:

(26, 8127), (29, 8145), (50, 8247), (59, 8301), (Start: 63 @8331 has 138 MA's), (65, 8337), (94, 8478), (96, 8493), (134, 8685), (157, 8772), (192, 8973), (195, 9069),

Gene: Sapo_11 Start: 7428, Stop: 8276, Start Num: 16

Candidate Starts for Sapo_11:

(Start: 16 @7428 has 4 MA's), (28, 7500), (33, 7524), (34, 7527), (48, 7575), (61, 7674), (77, 7752), (107, 7902), (111, 7920), (116, 7935), (117, 7941), (143, 8076), (158, 8127), (166, 8157), (168, 8178), (177, 8217), (179, 8235), (180, 8238),

Gene: SarBear_12 Start: 8297, Stop: 9094, Start Num: 63

Candidate Starts for SarBear_12:

(26, 8093), (29, 8111), (59, 8267), (Start: 63 @8297 has 138 MA's), (65, 8303), (94, 8444), (96, 8459), (134, 8651), (157, 8738), (192, 8939), (195, 9035),

Gene: Sharkboy_12 Start: 8555, Stop: 9349, Start Num: 63

Candidate Starts for Sharkboy_12:

(Start: 63 @8555 has 138 MA's), (65, 8561), (78, 8630), (94, 8702), (96, 8717), (134, 8909), (145, 8954), (157, 8996), (162, 9011), (183, 9128), (192, 9194), (196, 9302),

Gene: Shayna_11 Start: 8161, Stop: 8745, Start Num: 63

Candidate Starts for Shayna_11:

(Start: 63 @8161 has 138 MA's), (69, 8182), (94, 8299), (124, 8467), (134, 8506), (154, 8584),

Gene: SheckWes_12 Start: 7697, Stop: 8533, Start Num: 14

Candidate Starts for SheckWes_12:

(6, 7583), (8, 7643), (Start: 14 @7697 has 85 MA's), (22, 7730), (54, 7916), (68, 7976), (70, 7988), (115, 8189), (117, 8198), (119, 8204), (124, 8237), (131, 8267), (143, 8312), (181, 8474),

Gene: Shen_14 Start: 8961, Stop: 9545, Start Num: 63

Candidate Starts for Shen_14:

(Start: 63 @8961 has 138 MA's), (166, 9429), (178, 9498), (179, 9510),

Gene: SirBeanington_12 Start: 8323, Stop: 9120, Start Num: 63

Candidate Starts for SirBeanington_12:

(11, 8035), (24, 8116), (26, 8119), (29, 8137), (30, 8146), (59, 8293), (Start: 63 @8323 has 138 MA's), (65, 8329), (94, 8470), (96, 8485), (125, 8641), (134, 8677), (145, 8722), (157, 8764), (192, 8965),

Gene: SketchMex_12 Start: 7925, Stop: 8770, Start Num: 14

Candidate Starts for SketchMex_12:

(6, 7808), (8, 7868), (Start: 14 @7925 has 85 MA's), (22, 7958), (54, 8144), (70, 8216), (115, 8417), (119, 8432), (124, 8465), (137, 8510), (180, 8696), (181, 8702),

Gene: Skylord_11 Start: 8096, Stop: 8680, Start Num: 63

Candidate Starts for Skylord_11:

(Start: 63 @8096 has 138 MA's), (65, 8102), (69, 8117), (70, 8123), (96, 8255), (124, 8408), (126, 8414), (134, 8447), (153, 8522), (155, 8528), (157, 8534),

Gene: Slay_12 Start: 8773, Stop: 9570, Start Num: 63

Candidate Starts for Slay_12:

(26, 8569), (29, 8587), (59, 8743), (Start: 63 @8773 has 138 MA's), (65, 8779), (94, 8920), (96, 8935), (134, 9127), (157, 9214), (192, 9415), (195, 9511),

Gene: Sleepyhead_13 Start: 8334, Stop: 9200, Start Num: 14

Candidate Starts for Sleepyhead_13:

(Start: 14 @8334 has 85 MA's), (19, 8361), (26, 8388), (51, 8526), (110, 8811), (137, 8949),

Gene: Socotra_14 Start: 7939, Stop: 8781, Start Num: 14

Candidate Starts for Socotra_14:

(Start: 14 @7939 has 85 MA's), (22, 7972), (54, 8158), (70, 8230), (92, 8329), (115, 8431), (117, 8440), (119, 8446), (124, 8479), (134, 8515), (137, 8524), (180, 8710), (181, 8716),

Gene: Softsoap_12 Start: 8320, Stop: 9117, Start Num: 63

Candidate Starts for Softsoap_12:

(26, 8116), (29, 8134), (50, 8236), (59, 8290), (Start: 63 @8320 has 138 MA's), (65, 8326), (94, 8467), (96, 8482), (134, 8674), (157, 8761), (192, 8962), (195, 9058),

Gene: Solea_13 Start: 8706, Stop: 9503, Start Num: 63

Candidate Starts for Solea_13:

(26, 8502), (29, 8520), (50, 8622), (59, 8676), (Start: 63 @8706 has 138 MA's), (65, 8712), (94, 8853), (96, 8868), (134, 9060), (157, 9147), (192, 9348), (195, 9444),

Gene: Sopespian_13 Start: 7939, Stop: 8781, Start Num: 14

Candidate Starts for Sopespian_13:

(Start: 14 @7939 has 85 MA's), (22, 7972), (54, 8158), (70, 8230), (92, 8329), (115, 8431), (117, 8440), (119, 8446), (124, 8479), (134, 8515), (137, 8524), (180, 8710), (181, 8716),

Gene: Spooks_57 Start: 33105, Stop: 33695, Start Num: 62

Candidate Starts for Spooks_57:

(60, 33087), (Start: 62 @33105 has 7 MA's), (79, 33183), (101, 33291), (109, 33330), (114, 33351), (122, 33381), (127, 33423), (146, 33510), (155, 33543), (156, 33546), (161, 33561),

Gene: Squirrel_12 Start: 8549, Stop: 9136, Start Num: 63

Candidate Starts for Squirrel_12:

(Start: 63 @8549 has 138 MA's), (70, 8576), (94, 8690), (134, 8897), (142, 8930), (153, 8972), (154, 8975), (157, 8984),

Gene: Starburst_14 Start: 7939, Stop: 8781, Start Num: 14

Candidate Starts for Starburst_14:

(Start: 14 @7939 has 85 MA's), (22, 7972), (54, 8158), (70, 8230), (92, 8329), (115, 8431), (117, 8440), (119, 8446), (124, 8479), (134, 8515), (137, 8524), (180, 8710), (181, 8716),

Gene: SteamedHams_15 Start: 7954, Stop: 8799, Start Num: 14

Candidate Starts for SteamedHams_15:

(8, 7897), (Start: 14 @7954 has 85 MA's), (22, 7987), (54, 8173), (70, 8245), (115, 8446), (119, 8461), (124, 8494), (134, 8530), (137, 8539), (143, 8569), (180, 8725), (181, 8731),

Gene: Stoor_12 Start: 8566, Stop: 9363, Start Num: 63

Candidate Starts for Stoor_12:

(Start: 63 @8566 has 138 MA's), (65, 8572), (80, 8650), (94, 8716), (96, 8731), (126, 8890), (134, 8923), (145, 8968), (192, 9208),

Gene: Stromboli_12 Start: 8570, Stop: 9367, Start Num: 63

Candidate Starts for Stromboli_12:

(Start: 63 @8570 has 138 MA's), (65, 8576), (94, 8720), (96, 8735), (126, 8894), (134, 8927), (145, 8972), (183, 9146), (192, 9212),

Gene: StuartMinion_12 Start: 8406, Stop: 8987, Start Num: 63

Candidate Starts for StuartMinion_12:

(20, 8169), (23, 8190), (40, 8265), (53, 8355), (Start: 63 @8406 has 138 MA's), (69, 8427), (124, 8715), (126, 8721), (145, 8799), (156, 8838), (157, 8841), (185, 8973),

Gene: Success_58 Start: 32224, Stop: 32814, Start Num: 62

Candidate Starts for Success_58:

(60, 32206), (Start: 62 @32224 has 7 MA's), (94, 32362), (109, 32449), (114, 32470), (127, 32542), (132, 32563), (146, 32629), (155, 32662), (156, 32665), (161, 32680),

Gene: SummitAcademy_12 Start: 7775, Stop: 8614, Start Num: 14

Candidate Starts for SummitAcademy_12:

(6, 7661), (8, 7721), (Start: 14 @7775 has 85 MA's), (22, 7808), (54, 7994), (68, 8054), (70, 8066), (115, 8267), (117, 8276), (119, 8282), (124, 8315), (131, 8345), (143, 8390), (167, 8480),

Gene: SunnyD_11 Start: 8161, Stop: 8745, Start Num: 63

Candidate Starts for SunnyD_11:

(Start: 63 @8161 has 138 MA's), (69, 8182), (94, 8299), (124, 8467), (134, 8506), (154, 8584),

Gene: Survivors_15 Start: 8732, Stop: 9571, Start Num: 14

Candidate Starts for Survivors_15:

(Start: 14 @8732 has 85 MA's), (22, 8765), (65, 8993), (84, 9074), (94, 9122), (106, 9179), (109, 9191), (115, 9215), (119, 9230), (140, 9323), (150, 9356), (152, 9368), (153, 9371), (182, 9506), (190, 9554),

Gene: SweatNTears_15 Start: 8436, Stop: 9281, Start Num: 14

Candidate Starts for SweatNTears_15:

(6, 8319), (8, 8379), (Start: 14 @8436 has 85 MA's), (22, 8469), (54, 8655), (70, 8727), (115, 8928), (119, 8943), (124, 8976), (137, 9021), (180, 9207), (181, 9213),

Gene: Swervy_12 Start: 8297, Stop: 9094, Start Num: 63

Candidate Starts for Swervy_12:

(26, 8093), (29, 8111), (59, 8267), (Start: 63 @8297 has 138 MA's), (65, 8303), (94, 8444), (96, 8459), (134, 8651), (157, 8738), (192, 8939), (195, 9035),

Gene: TPA4_13 Start: 9127, Stop: 9984, Start Num: 13

Candidate Starts for TPA4_13:

(Start: 13 @9127 has 1 MA's), (44, 9256), (Start: 62 @9376 has 7 MA's), (70, 9406), (115, 9625), (120, 9646), (121, 9649), (126, 9688), (130, 9700), (170, 9868), (176, 9898), (181, 9928), (188, 9964),

Gene: Tarnish_13 Start: 8074, Stop: 8913, Start Num: 14

Candidate Starts for Tarnish_13:

(6, 7960), (8, 8020), (Start: 14 @8074 has 85 MA's), (22, 8107), (54, 8293), (68, 8353), (70, 8365), (115, 8566), (117, 8575), (119, 8581), (124, 8614), (131, 8644), (143, 8689), (167, 8779),

Gene: TaylorSipht_13 Start: 8839, Stop: 9423, Start Num: 63

Candidate Starts for TaylorSipht_13:

(Start: 63 @8839 has 138 MA's), (85, 8938), (156, 9271), (178, 9376), (179, 9388),

Gene: Teagster_11 Start: 8161, Stop: 8745, Start Num: 63

Candidate Starts for Teagster_11:

(Start: 63 @8161 has 138 MA's), (69, 8182), (124, 8467), (134, 8506), (154, 8584),

Gene: Toad24_14 Start: 8961, Stop: 9545, Start Num: 63

Candidate Starts for Toad24_14:

(Start: 63 @8961 has 138 MA's), (166, 9429), (178, 9498), (179, 9510),

Gene: Tolls_15 Start: 7957, Stop: 8802, Start Num: 14

Candidate Starts for Tolls_15:

(8, 7900), (Start: 14 @7957 has 85 MA's), (22, 7990), (54, 8176), (70, 8248), (115, 8449), (119, 8464), (124, 8497), (134, 8533), (137, 8542), (143, 8572), (180, 8728), (181, 8734),

Gene: Troje_13 Start: 7910, Stop: 8755, Start Num: 14

Candidate Starts for Troje_13:

(6, 7793), (8, 7853), (Start: 14 @7910 has 85 MA's), (22, 7943), (54, 8129), (70, 8201), (115, 8402), (119, 8417), (124, 8450), (137, 8495), (180, 8681), (181, 8687),

Gene: TukTuk_12 Start: 8357, Stop: 9154, Start Num: 63

Candidate Starts for TukTuk_12:

(26, 8153), (29, 8171), (59, 8327), (Start: 63 @8357 has 138 MA's), (65, 8363), (94, 8504), (96, 8519), (134, 8711), (157, 8798), (192, 8999),

Gene: Typhonomachy_13 Start: 7939, Stop: 8781, Start Num: 14

Candidate Starts for Typhonomachy_13:

(Start: 14 @7939 has 85 MA's), (22, 7972), (54, 8158), (70, 8230), (92, 8329), (115, 8431), (117, 8440), (119, 8446), (124, 8479), (134, 8515), (137, 8524), (180, 8710), (181, 8716),

Gene: Vine_14 Start: 8704, Stop: 9543, Start Num: 14

Candidate Starts for Vine_14:

(6, 8590), (8, 8650), (Start: 14 @8704 has 85 MA's), (22, 8737), (54, 8923), (68, 8983), (70, 8995), (115, 9196), (117, 9205), (119, 9211), (124, 9244), (131, 9274), (143, 9319), (167, 9409),

Gene: Vitas_11 Start: 8096, Stop: 8680, Start Num: 63

Candidate Starts for Vitas_11:

(Start: 63 @8096 has 138 MA's), (65, 8102), (69, 8117), (70, 8123), (96, 8255), (124, 8408), (126, 8414), (134, 8447), (153, 8522), (155, 8528), (157, 8534),

Gene: Vulpecula_13 Start: 9147, Stop: 9977, Start Num: 63

Candidate Starts for Vulpecula_13:

(Start: 63 @9147 has 138 MA's), (124, 9456), (141, 9522), (156, 9579), (171, 9651), (178, 9684), (179, 9696), (187, 9738), (191, 9768), (192, 9783), (194, 9858),

Gene: WalkingDead_12 Start: 8557, Stop: 9354, Start Num: 63

Candidate Starts for WalkingDead_12:

(Start: 63 @8557 has 138 MA's), (65, 8563), (94, 8707), (96, 8722), (126, 8881), (134, 8914), (145, 8959), (157, 9001), (183, 9133), (192, 9199),

Gene: Wallaby_17 Start: 8877, Stop: 9716, Start Num: 14

Candidate Starts for Wallaby_17:

(Start: 14 @8877 has 85 MA's), (22, 8910), (65, 9138), (84, 9219), (94, 9267), (106, 9324), (109, 9336), (115, 9360), (119, 9375), (140, 9468), (150, 9501), (152, 9513), (153, 9516), (182, 9651), (190, 9699),

Gene: Westrich_14 Start: 8949, Stop: 9533, Start Num: 63

Candidate Starts for Westrich_14:

(Start: 63 @8949 has 138 MA's), (166, 9417), (178, 9486), (179, 9498),

Gene: WileyE_12 Start: 8482, Stop: 9312, Start Num: 63

Candidate Starts for WileyE_12:

(Start: 63 @8482 has 138 MA's), (124, 8791), (141, 8857), (156, 8914), (171, 8986), (178, 9019), (187, 9073), (192, 9118), (194, 9193),

Gene: Wolfwood_15 Start: 8877, Stop: 9716, Start Num: 14

Candidate Starts for Wolfwood_15:

(Start: 14 @8877 has 85 MA's), (22, 8910), (65, 9138), (84, 9219), (94, 9267), (106, 9324), (109, 9336), (115, 9360), (119, 9375), (140, 9468), (150, 9501), (152, 9513), (153, 9516), (182, 9651), (190, 9699),

Gene: Wrigley_14 Start: 8561, Stop: 9406, Start Num: 14

Candidate Starts for Wrigley_14:

(Start: 14 @8561 has 85 MA's), (29, 8630), (31, 8642), (83, 8906), (92, 8951), (94, 8960), (113, 9047), (124, 9101),

Gene: Yakult_14 Start: 7841, Stop: 8674, Start Num: 14

Candidate Starts for Yakult_14:

(Start: 14 @7841 has 85 MA's), (22, 7874), (36, 7946), (43, 7964), (45, 7970), (54, 8048), (84, 8189), (87, 8204), (106, 8294), (109, 8306), (110, 8312), (115, 8330), (119, 8345), (138, 8423), (140, 8435), (163, 8513), (180, 8609), (189, 8657),

Gene: Yarn_12 Start: 7947, Stop: 8792, Start Num: 14

Candidate Starts for Yarn_12:

(8, 7890), (Start: 14 @7947 has 85 MA's), (22, 7980), (54, 8166), (70, 8238), (115, 8439), (119, 8454), (124, 8487), (134, 8523), (137, 8532), (143, 8562), (180, 8718), (181, 8724),

Gene: Yucky_13 Start: 8564, Stop: 9403, Start Num: 14

Candidate Starts for Yucky_13:

(6, 8450), (8, 8510), (Start: 14 @8564 has 85 MA's), (22, 8597), (54, 8783), (68, 8843), (70, 8855), (94, 8963), (115, 9056), (117, 9065), (119, 9071), (124, 9104), (131, 9134), (143, 9179), (167, 9269),

Gene: Yummy_14 Start: 7821, Stop: 8666, Start Num: 14

Candidate Starts for Yummy_14:

(Start: 14 @7821 has 85 MA's), (22, 7854), (54, 8040), (70, 8112), (115, 8313), (119, 8328), (124, 8361), (137, 8406), (180, 8592), (181, 8598),

Gene: Zareef_15 Start: 8879, Stop: 9718, Start Num: 14

Candidate Starts for Zareef_15:

(Start: 14 @8879 has 85 MA's), (22, 8912), (65, 9140), (84, 9221), (94, 9269), (106, 9326), (109, 9338), (115, 9362), (119, 9377), (140, 9470), (150, 9503), (152, 9515), (153, 9518), (182, 9653), (190, 9701),

Gene: Zhuangyuan_14 Start: 9137, Stop: 9718, Start Num: 63

Candidate Starts for Zhuangyuan_14:

(Start: 63 @9137 has 138 MA's), (69, 9158), (124, 9446), (145, 9530), (156, 9569), (166, 9605), (169, 9632), (185, 9704),

Gene: Zixiang_13 Start: 8750, Stop: 9334, Start Num: 63

Candidate Starts for Zixiang_13:

(Start: 63 @8750 has 138 MA's), (124, 9059), (157, 9185), (166, 9218), (178, 9287), (179, 9299),