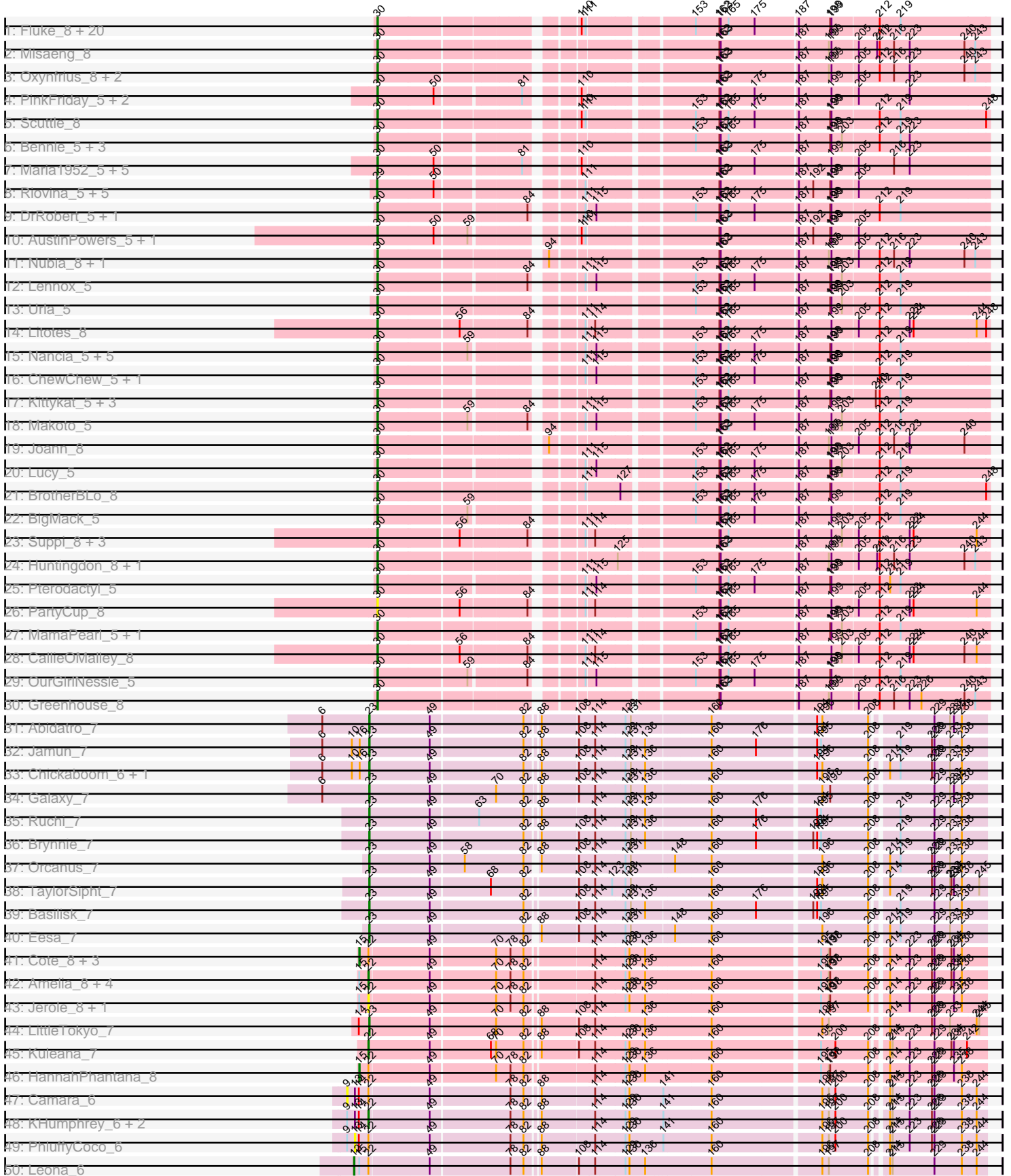
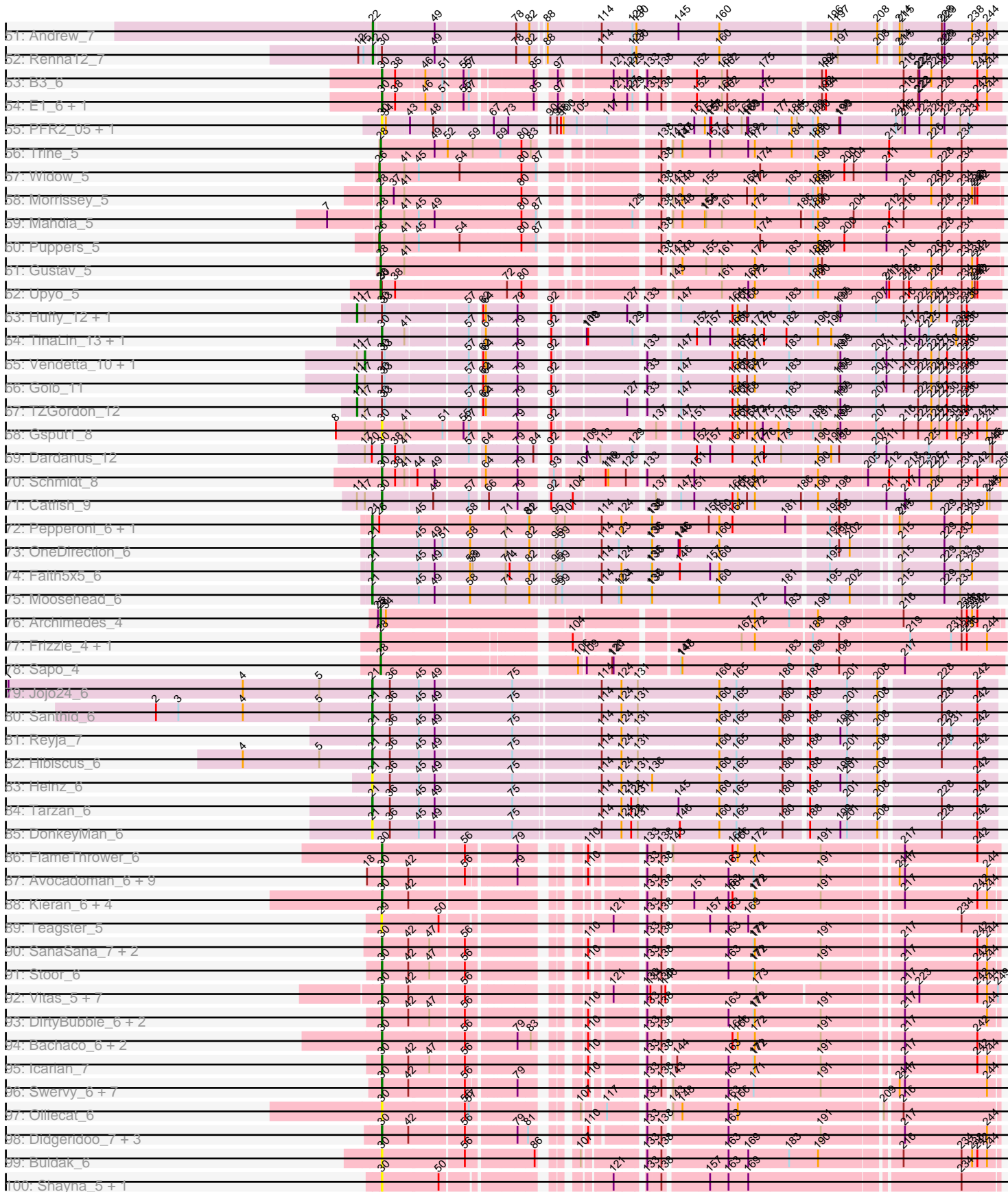


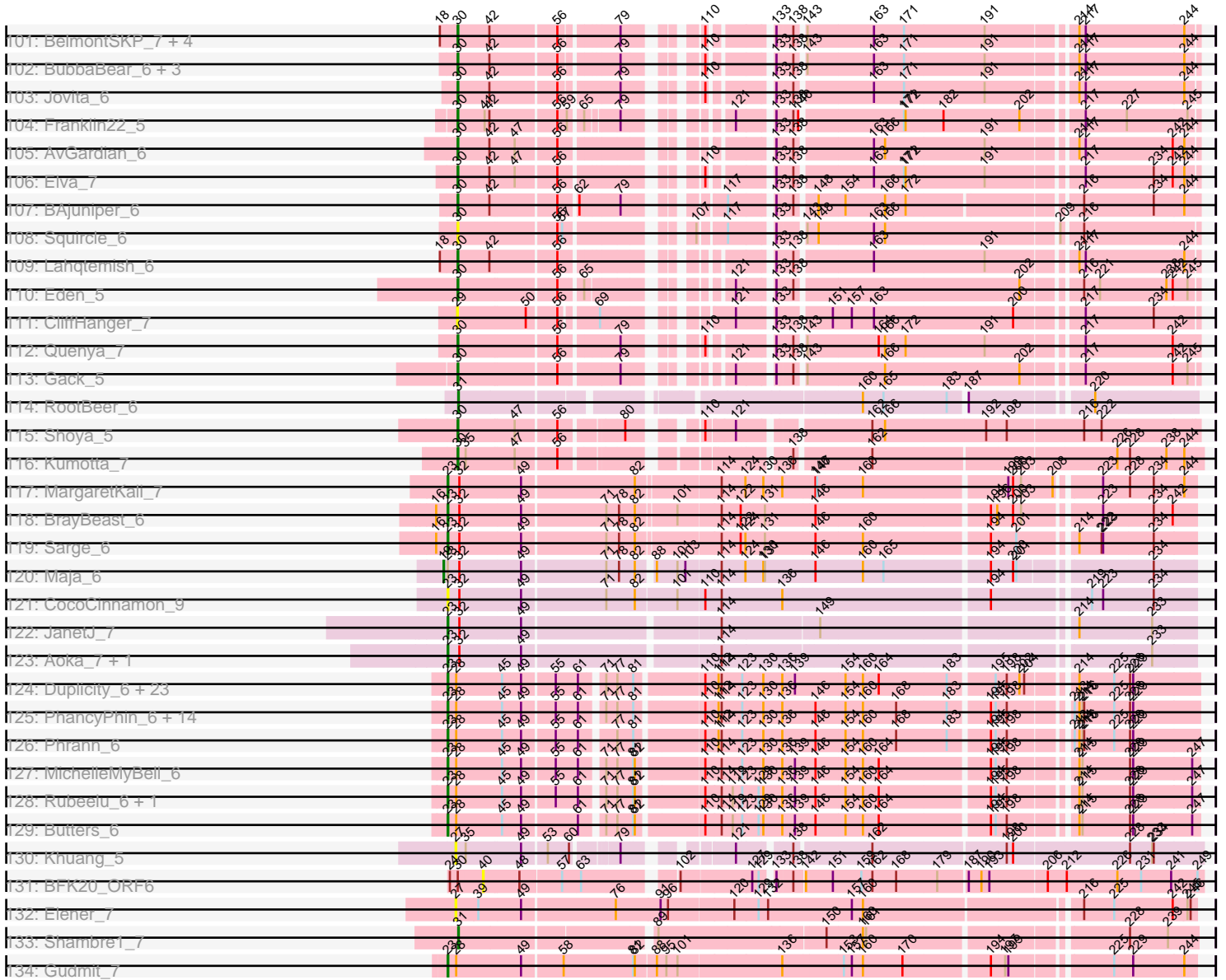
Pham 192263



Pham 192263



Pham 192263



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 192263 Report

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

Pham number 192263 has 289 members, 32 are drafts.

Phages represented in each track:

- Track 1 : Fluke_8, Vallejo_8, Glenn_8, MrGloopy_8, Zorro_8, Dino_8, Cholula_8, Potatoes_8, RAP15_8, Beethoven_8, MeganNoll_8, Korra_8, TattModd_8, Jumboset_8, Immaculata_8, Kalizoi_8, Wawa_8, Carpal_8, Savage2526_8, Rozby_8, Riverdale_8
- Track 2 : Misaeng_8
- Track 3 : Oxynfrius_8, Lakshmi_8, Albanese_8
- Track 4 : PinkFriday_5, Pumancara_5, Supakev_5
- Track 5 : Scuttle_8
- Track 6 : Bennie_5, HeadNerd_5, Huckleberry_5, Moki_5
- Track 7 : Maria1952_5, KingBob_5, Herb_5, Sergei_5, Daiboju_5, Temper16_5
- Track 8 : Riovina_5, Vulture_5, Eunoia_5, HunterDalle_5, OMalley_5, Aledel_5
- Track 9 : DrRobert_5, Christian_5
- Track 10 : AustinPowers_5, Chridison_5
- Track 11 : Nubia_8, GreenHearts_8
- Track 12 : Lennox_5
- Track 13 : Urla_5
- Track 14 : Litotes_8
- Track 15 : Nancia_5, Bodacious_5, CristinaYang_5, PitaDog_5, LilStuart_5, Lasagna_5
- Track 16 : ChewChew_5, WonderBoy_5
- Track 17 : Kittykat_5, Gisselle_5, DreamTeam_5, Preamble_5
- Track 18 : Makoto_5
- Track 19 : Joann_8
- Track 20 : Lucy_5
- Track 21 : BrotherBLo_8
- Track 22 : BigMack_5
- Track 23 : Suppi_8, Canowicakte_8, AppleCider_8, Wayne_8
- Track 24 : Huntingdon_8, RcigaStruga_8
- Track 25 : Pterodactyl_5
- Track 26 : PartyCup_8
- Track 27 : MamaPearl_5, EstebanJulior_5
- Track 28 : CallieOMalley_8
- Track 29 : OurGirlNessie_5
- Track 30 : Greenhouse_8
- Track 31 : Abidatro_7
- Track 32 : Jamun_7
- Track 33 : Chickaboom_6, Vulpecula_7

- Track 34 : Galaxy_7
- Track 35 : Ruchi_7
- Track 36 : Brynnie_7
- Track 37 : Orcanus_7
- Track 38 : TaylorSipht_7
- Track 39 : Basilisk_7
- Track 40 : Eesa_7
- Track 41 : Cote_8, Daob_8, Melons_8, Coral_7
- Track 42 : Amelia_8, Polka_7, Lunar_8, Colusalem_7, Kepler_7
- Track 43 : Jerole_8, Bedetta_8
- Track 44 : LittleTokyo_7
- Track 45 : Kuleana_7
- Track 46 : HannahPhantana_8
- Track 47 : Camara_6
- Track 48 : KHumphrey_6, Juno112_6, RedFox_6
- Track 49 : PhluffyCoco_6
- Track 50 : Leona_6
- Track 51 : Andrew_7
- Track 52 : Renna12_7
- Track 53 : B3_6
- Track 54 : E1_6, Anatole_6
- Track 55 : PFR2_05, PFR1_05
- Track 56 : Trine_5
- Track 57 : Widow_5
- Track 58 : Morrissey_5
- Track 59 : Mahdia_5
- Track 60 : Puppies_5
- Track 61 : Gustav_5
- Track 62 : Upyo_5
- Track 63 : Huffy_12, DinoDaryn_12
- Track 64 : TinaLin_13, Banquo_14
- Track 65 : Vendetta_10, Splinter_10
- Track 66 : Goib_11
- Track 67 : TZGordon_12
- Track 68 : Gspu1_8
- Track 69 : Dardanus_12
- Track 70 : Schmidt_8
- Track 71 : Catfish_9
- Track 72 : Pepperoni_6, Lton_6
- Track 73 : OneDirection_6
- Track 74 : Faith5x5_6
- Track 75 : Moosehead_6
- Track 76 : Archimedes_4
- Track 77 : Frizzle_4, Ghobes_4
- Track 78 : Sapo_4
- Track 79 : Jojo24_6
- Track 80 : Santhid_6
- Track 81 : Reyja_7
- Track 82 : Hibiscus_6
- Track 83 : Heinz_6
- Track 84 : Tarzan_6
- Track 85 : DonkeyMan_6
- Track 86 : FlameThrower_6

- Track 87 : Avocadoman_6, Doobus_6, Burritobowl_6, Johnathan_6, Arroyo_7, Cashington_6, LimaBean_6, DickRichards_6, Albright_6, Abigail_6
- Track 88 : Kieran_6, Sharkboy_6, Dismas_6, Rona_6, ChiliPepper_6
- Track 89 : Teagster_5
- Track 90 : SanaSana_7, WalkingDead_6, Loviatar_12
- Track 91 : Stoor_6
- Track 92 : Vitas_5, Rollins_5, Clayda5_5, Bernstein_5, Brahms_5, Armstrong_5, Coltrane_5, Skylord_5
- Track 93 : DirtyBubble_6, Stromboli_6, BabyYoda_6
- Track 94 : Bachaco_6, Celaena_6, Katzastrophic_6
- Track 95 : Icarian_7
- Track 96 : Swervy_6, Finalfrontier_7, TukTuk_6, SarBear_6, Nicky22_7, Slay_6, Eula_6, QMacho_7
- Track 97 : Olliecat_6
- Track 98 : Didgeridoo_7, IndyLu_6, Kate33_6, BabyDaisy_7
- Track 99 : Buldak_6
- Track 100 : Shayna_5, SunnyD_5
- Track 101 : BelmontSKP_7, Kenzers_6, CroZenni_6, Lynlen_6, AnnaLie_7
- Track 102 : BubbaBear_6, SansAfet_6, Phisb_6, Albedo_6
- Track 103 : Jovita_6
- Track 104 : Franklin22_5
- Track 105 : AvGardian_6
- Track 106 : Elva_7
- Track 107 : BAjuniper_6
- Track 108 : Squirrel_6
- Track 109 : Lahqtemish_6
- Track 110 : Eden_5
- Track 111 : CliffHanger_7
- Track 112 : Quenya_7
- Track 113 : Gack_5
- Track 114 : RootBeer_6
- Track 115 : Shoya_5
- Track 116 : Kumotta_7
- Track 117 : MargaretKali_7
- Track 118 : BrayBeast_6
- Track 119 : Sarge_6
- Track 120 : Maja_6
- Track 121 : CocoCinnamon_9
- Track 122 : JanetJ_7
- Track 123 : Aoka_7, EvenBluerMoon_7
- Track 124 : Duplicity_6, Melville_6, Journey_6, Carcharodon_6, Xerxes_6, Bosection6_6, Philonius_6, Andies_6, Scitech_6, Xeno_6, Aggie_6, Schnauzer_6, Silvafighter_6, Tapioca_6, Fulbright_6, Gex_6, Magsby_6, Parmesanjohn_6, Charlie_6, Silvy_6, Smurph_6, Pipsqueaks_6, Chewbacca_6, Phloss_6
- Track 125 : PhancyPhin_6, Hanako_6, SkinnyPete_6, Raymond7_6, Shweta_6, Redi_6, SpongeBob_6, Jamie19_6, Nenae_6, Snekmaggedon_6, Rebel_6, Panchino_6, ShrimpFriedEgg_6, BabeRuth_6, Purgamenstris_6
- Track 126 : Phrann_6
- Track 127 : MichelleMyBell_6
- Track 128 : Rubeelu_6, Kevin1_6
- Track 129 : Butters_6
- Track 130 : Khuang_5
- Track 131 : BFK20_ORF6

- Track 132 : Elener_7
- Track 133 : Shambre1_7
- Track 134 : Gudmit_7

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

The start number called the most often in the published annotations is 30, it was called in 148 of the 257 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abigail_6, Albanese_8, Albedo_6, Albright_6, Anatole_6, AnnaLie_7, AppleCider_8, Armstrong_5, Arroyo_7, AustinPowers_5, AvGardian_6, Avocadoman_6, B3_6, BAJuniper_6, BabyDaisy_7, BabyYoda_6, Bachaco_6, Banquo_14, Beethoven_8, BelmontSKP_7, Bennie_5, Bernstein_5, BigMack_5, Bodacious_5, Brahms_5, BrotherBLo_8, BubbaBear_6, Buldak_6, Burritobowl_6, CallieOMalley_8, Canowicakte_8, Carpal_8, Cashington_6, Catfish_9, Celaena_6, ChewChew_5, ChiliPepper_6, Cholula_8, Chridison_5, Christian_5, Clayda5_5, Coltrane_5, CristinaYang_5, CroZenni_6, Daiboju_5, Dardanus_12, DickRichards_6, Didgeridoo_7, Dino_8, DirtyBubble_6, Dismas_6, Doobus_6, DrRobert_5, DreamTeam_5, E1_6, Eden_5, Elva_7, EstebanJulior_5, Eula_6, Finalfrontier_7, FlameThrower_6, Fluke_8, Franklin22_5, Gack_5, Gisselle_5, Glenn_8, GreenHearts_8, Greenhouse_8, Gsput1_8, HeadNerd_5, Herb_5, Huckleberry_5, Huntingdon_8, Icarian_7, Immaculata_8, IndyLu_6, Joann_8, Johnathan_6, Jovita_6, Jumboset_8, Kalizoi_8, Kate33_6, Katzastrophic_6, Kenzers_6, Kieran_6, KingBob_5, Kittykat_5, Korra_8, Kumotta_7, Lahqtemish_6, Lakshmi_8, Lasagna_5, Lennox_5, LilStuart_5, LimaBean_6, Litotes_8, Loviatar_12, Lucy_5, Lynlen_6, Makoto_5, MamaPearl_5, Maria1952_5, MeganNoll_8, Misaeng_8, Moki_5, MrGloopy_8, Nancia_5, Nicky22_7, Nubia_8, Olliecat_6, OurGirlNessie_5, Oxynfrius_8, PFR1_05, PFR2_05, PartyCup_8, Phisb_6, PinkFriday_5, PitaDog_5, Potatoes_8, Preamble_5, Pterodactyl_5, Pumancara_5, QMacho_7, Quenya_7, RAP15_8, RcigaStruga_8, Riverdale_8, Rollins_5, Rona_6, Rozby_8, SanaSana_7, SansAfet_6, SarBear_6, Savage2526_8, Schmidt_8, Scuttle_8, Sergei_5, Sharkboy_6, Shayna_5, Shoya_5, Skylord_5, Slay_6, Squircle_6, Stoor_6, Stromboli_6, SunnyD_5, Supakev_5, Suppi_8, Swervy_6, TattModd_8, Temper16_5, TinaLin_13, TukTuk_6, Urla_5, Vallejo_8, Vitas_5, WalkingDead_6, Wawa_8, Wayne_8, WonderBoy_5, Zorro_8,

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

- BFK20_ORF6, DinoDaryn_12, Goib_11, Huffy_12, Renna12_7, Splinter_10, TZGordon_12, Upyo_5, Vendetta_10,

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

- Abidatro_7, Aggie_6, Aledel_5, Amelia_8, Andies_6, Andrew_7, Aoka_7, Archimedes_4, BabeRuth_6, Basilisk_7, Bedetta_8, Bosection6_6, BrayBeast_6, Brynnie_7, Butters_6, Camara_6, Carcharodon_6, Charlie_6, Chewbacca_6, Chickaboom_6, CliffHanger_7, CocoCinnamon_9, Colusalem_7, Coral_7, Cote_8, Daob_8, DonkeyMan_6, Duplicity_6, Eesa_7, Elener_7, Eunoia_5, EvenBluerMoon_7, Faith5x5_6, Frizzle_4, Fulbright_6, Galaxy_7, Gex_6, Ghobes_4, Gudmit_7, Gustav_5, Hanako_6, HannahPhantana_8, Heinz_6, Hibiscus_6, HunterDalle_5, Jamie19_6, Jamun_7, JanetJ_7, Jerole_8, Jojo24_6, Journey_6,

Juno112_6, KHumphrey_6, Kepler_7, Kevin1_6, Khuang_5, Kuleana_7, Leona_6, LittleTokyo_7, Lton_6, Lunar_8, Magsby_6, Mahdia_5, Maja_6, MargaretKali_7, Melons_8, Melville_6, MichelleMyBell_6, Moosehead_6, Morrissey_5, Nenae_6, OMalley_5, OneDirection_6, Orcanus_7, Panchino_6, ParmesanJohn_6, Pepperoni_6, PhancyPhin_6, Philonius_6, Phloss_6, PhluffyCoco_6, Phrann_6, Pipsqueaks_6, Polka_7, Puppets_5, Purgamenstris_6, Raymond7_6, Rebel_6, RedFox_6, Redi_6, Reyja_7, Riovina_5, RootBeer_6, Rubeelu_6, Ruchi_7, Santhid_6, Sapo_4, Sarge_6, Schnauzer_6, Scitech_6, Shambre1_7, ShrimpFriedEgg_6, Shweta_6, Silvafighter_6, Silvy_6, SkinnyPete_6, Smurph_6, Snekmaggon_6, SpongeBob_6, Tapioca_6, Tarzan_6, TaylorSipht_7, Teagster_5, Trine_5, Vulpecula_7, Vulture_5, Widow_5, Xeno_6, Xerxes_6,

Summary by start number:

Start 9:

- Found in 5 of 289 (1.7%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Camara_6 (AS3),

Start 11:

- Found in 7 of 289 (2.4%) of genes in pham
- Manual Annotations of this start: 4 of 257
- Called 57.1% of time when present
- Phage (with cluster) where this start called: DinoDaryn_12 (CU1), Goib_11 (CU1), Huffy_12 (CU1), TZGordon_12 (CU1),

Start 12:

- Found in 2 of 289 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 257
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Leona_6 (AS3),

Start 13:

- Found in 5 of 289 (1.7%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: PhluffyCoco_6 (AS3),

Start 15:

- Found in 14 of 289 (4.8%) of genes in pham
- Manual Annotations of this start: 5 of 257
- Called 35.7% of time when present
- Phage (with cluster) where this start called: Coral_7 (AS2), Cote_8 (AS2), Daob_8 (AS2), HannahPhantana_8 (AS2), Melons_8 (AS2),

Start 17:

- Found in 9 of 289 (3.1%) of genes in pham
- Manual Annotations of this start: 2 of 257
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Splinter_10 (CU1), Vendetta_10 (CU1),

Start 19:

- Found in 1 of 289 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 257
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Maja_6 (FO),

Start 21:

- Found in 12 of 289 (4.2%) of genes in pham
- Manual Annotations of this start: 9 of 257
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DonkeyMan_6 (DY), Faith5x5_6 (CZ6), Heinz_6 (DY), Hibiscus_6 (DY), Jojo24_6 (DY), Lton_6 (CZ), Moosehead_6 (CZ6), OneDirection_6 (CZ6), Pepperoni_6 (CZ), Reyja_7 (DY), Santhid_6 (DY), Tarzan_6 (DY),

Start 22:

- Found in 21 of 289 (7.3%) of genes in pham
- Manual Annotations of this start: 10 of 257
- Called 61.9% of time when present
- Phage (with cluster) where this start called: Amelia_8 (AS2), Andrew_7 (AS3), Bedetta_8 (AS2), Colusalem_7 (AS2), Jerole_8 (AS2), Juno112_6 (AS3), KHumphrey_6 (AS3), Kepler_7 (AS2), Kuleana_7 (AS2), Lunar_8 (AS2), Polka_7 (AS2), RedFox_6 (AS3), Renna12_7 (AS3),

Start 23:

- Found in 65 of 289 (22.5%) of genes in pham
- Manual Annotations of this start: 59 of 257
- Called 98.5% of time when present
- Phage (with cluster) where this start called: Abidatro_7 (AS1), Aggie_6 (N), Andies_6 (N), Aoka_7 (FO), BabeRuth_6 (N), Basilisk_7 (AS1), Bosection6_6 (N), BrayBeast_6 (FB), Brynnie_7 (AS1), Butters_6 (N), Carcharodon_6 (N), Charlie_6 (N), Chewbacca_6 (N), Chickaboom_6 (AS1), CocoCinnamon_9 (FO), Duplicity_6 (N), Eesa_7 (AS1), EvenBluerMoon_7 (FO), Fulbright_6 (N), Galaxy_7 (AS1), Gex_6 (N), Gudmit_7 (singleton), Hanako_6 (N), Jamie19_6 (N), Jamun_7 (AS1), JanetJ_7 (FO), Journey_6 (N), Kevin1_6 (N), LittleTokyo_7 (AS2), Magsby_6 (N), MargaretKali_7 (FB), Melville_6 (N), MichelleMyBell_6 (N), Nenae_6 (N), Orcanus_7 (AS1), Panchino_6 (N), Parmesanjohn_6 (N), PhancyPhin_6 (N), Philonius_6 (N), Phloss_6 (N), Phrann_6 (N), Pipsqueaks_6 (N), Purgamenstris_6 (N), Raymond7_6 (N), Rebel_6 (N), Redi_6 (N), Rubeelu_6 (N), Ruchi_7 (AS1), Sarge_6 (FB), Schnauzer_6 (N), Scitech_6 (N), ShrimpFriedEgg_6 (N), Shweta_6 (N), Silvafighter_6 (N), Silvy_6 (N), SkinnyPete_6 (N), Smurph_6 (N), Snekmaggedon_6 (N), SpongeBob_6 (N), Tapioca_6 (N), TaylorSipt_7 (AS1), Vulpecula_7 (AS1), Xeno_6 (N), Xerxes_6 (N),

Start 26:

- Found in 4 of 289 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 257
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Puppies_5 (CD), Widow_5 (CD),

Start 27:

- Found in 2 of 289 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Elener_7 (singleton), Khuang_5 (UNK),

Start 28:

- Found in 54 of 289 (18.7%) of genes in pham
- Manual Annotations of this start: 8 of 257
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Archimedes_4 (DA), Frizzle_4 (DA), Ghobes_4 (DA), Gustav_5 (CD), Mahdia_5 (CD), Morrissey_5 (CD), Sapo_4 (DA), Trine_5 (CD), Upyo_5 (CD),

Start 29:

- Found in 8 of 289 (2.8%) of genes in pham
- Manual Annotations of this start: 6 of 257
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aledel_5 (AK), CliffHanger_7 (EB), Eunoia_5 (AK), HunterDalle_5 (AK), OMalley_5 (AK), Riovina_5 (AK), Teagster_5 (EB), Vulture_5 (AK),

Start 30:

- Found in 170 of 289 (58.8%) of genes in pham
- Manual Annotations of this start: 148 of 257
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Abigail_6 (EB), Albanese_8 (AK), Albedo_6 (EB), Albright_6 (EB), Anatole_6 (BV), AnnaLie_7 (EB), AppleCider_8 (AK), Armstrong_5 (EB), Arroyo_7 (EB), AustinPowers_5 (AK), AvGardian_6 (EB), Avocadoman_6 (EB), B3_6 (BV), BAjuniper_6 (EB), BabyDaisy_7 (EB), BabyYoda_6 (EB), Bachaco_6 (EB), Banquo_14 (CU1), Beethoven_8 (AK), BelmontSKP_7 (EB), Bennie_5 (AK), Bernstein_5 (EB), BigMack_5 (AK), Bodacious_5 (AK), Brahms_5 (EB), BrotherBLo_8 (AK), BubbaBear_6 (EB), Buldak_6 (EB), Burritobowl_6 (EB), CallieOMalley_8 (AK), Canowicakte_8 (AK), Carpal_8 (AK), Cashington_6 (EB), Catfish_9 (CU5), Celaena_6 (EB), ChewChew_5 (AK), ChiliPepper_6 (EB), Cholula_8 (AK), Chridison_5 (AK), Christian_5 (AK), Clayda5_5 (EB), Coltrane_5 (EB), CristinaYang_5 (AK), CroZenni_6 (EB), Daiboju_5 (AK), Dardanus_12 (CU3), DickRichards_6 (EB), Didgeridoo_7 (EB), Dino_8 (AK), DirtyBubble_6 (EB), Dismas_6 (EB), Doobus_6 (EB), DrRobert_5 (AK), DreamTeam_5 (AK), E1_6 (BV), Eden_5 (EB), Elva_7 (EB), EstebanJulior_5 (AK), Eula_6 (EB), Finalfrontier_7 (EB), FlameThrower_6 (EB), Fluke_8 (AK), Franklin22_5 (EB), Gack_5 (EB), Gisselle_5 (AK), Glenn_8 (AK), GreenHearts_8 (AK), Greenhouse_8 (AK), Gspu1_8 (CU2), HeadNerd_5 (AK), Herb_5 (AK), Huckleberry_5 (AK), Huntingdon_8 (AK), Icarian_7 (EB), Immaculata_8 (AK), IndyLu_6 (EB), Joann_8 (AK), Johnathan_6 (EB), Jovita_6 (EB), Jumboset_8 (AK), Kalizoi_8 (AK), Kate33_6 (EB), Katzastrophic_6 (EB), Kenzers_6 (EB), Kieran_6 (EB), KingBob_5 (AK), Kittykat_5 (AK), Korra_8 (AK), Kumotta_7 (FB), Lahqtemish_6 (EB), Lakshmi_8 (AK), Lasagna_5 (AK), Lennox_5 (AK), LilStuart_5 (AK), LimaBean_6 (EB), Litotes_8 (AK), Loviatar_12 (EB), Lucy_5 (AK), Lynlen_6 (EB), Makoto_5 (AK), MamaPearl_5 (AK), Maria1952_5 (AK), MeganNoll_8 (AK), Misaeng_8 (AK), Moki_5 (AK), MrGloopy_8 (AK), Nancia_5 (AK), Nicky22_7 (EB), Nubia_8 (AK), Olliecat_6 (EB), OurGirlNessie_5 (AK), Oxyfrieus_8 (AK), PFR1_05 (BX), PFR2_05 (BX), PartyCup_8 (AK), Phisb_6 (EB), PinkFriday_5 (AK), PitaDog_5 (AK), Potatoes_8 (AK), Preamble_5 (AK), Pterodactyl_5 (AK), Pumancara_5 (AK), QMacho_7 (EB), Quenya_7 (EB), RAP15_8 (AK), RcigaStruga_8 (AK), Riverdale_8 (AK), Rollins_5 (EB), Rona_6 (EB), Rozby_8 (AK), SanaSana_7 (EB), SansAfet_6 (EB), SarBear_6 (EB), Savage2526_8 (AK), Schmidt_8 (CU4), Scuttle_8 (AK), Sergei_5 (AK), Sharkboy_6 (EB), Shayna_5 (EB), Shoya_5 (FB),

Skylord_5 (EB), Slay_6 (EB), Squircle_6 (EB), Stoor_6 (EB), Stromboli_6 (EB), SunnyD_5 (EB), Supakev_5 (AK), Suppi_8 (AK), Swervy_6 (EB), TattModd_8 (AK), Temper16_5 (AK), TinaLin_13 (CU1), TukTuk_6 (EB), Urla_5 (AK), Vallejo_8 (AK), Vitas_5 (EB), WalkingDead_6 (EB), Wawa_8 (AK), Wayne_8 (AK), WonderBoy_5 (AK), Zorro_8 (AK),

Start 31:

- Found in 2 of 289 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 257
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RootBeer_6 (FA), Shambre1_7 (singleton),

Start 40:

- Found in 1 of 289 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BFK20_ORF6 (singleton),

Summary by clusters:

There are 23 clusters represented in this pham: singleton, UNK, CZ6, DA, FA, FB, DY, BX, FO, CU5, CU4, CU3, CU2, CU1, AS3, AS2, AS1, AK, N, CZ, EB, BV, CD,

Info for manual annotations of cluster AK:

- Start number 29 was manually annotated 6 times for cluster AK.
- Start number 30 was manually annotated 77 times for cluster AK.

Info for manual annotations of cluster AS1:

- Start number 23 was manually annotated 11 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 15 was manually annotated 5 times for cluster AS2.
- Start number 22 was manually annotated 5 times for cluster AS2.
- Start number 23 was manually annotated 1 time for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 12 was manually annotated 1 time for cluster AS3.
- Start number 22 was manually annotated 5 times for cluster AS3.

Info for manual annotations of cluster BV:

- Start number 30 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster CD:

- Start number 26 was manually annotated 2 times for cluster CD.
- Start number 28 was manually annotated 5 times for cluster CD.

Info for manual annotations of cluster CU1:

- Start number 11 was manually annotated 4 times for cluster CU1.
- Start number 17 was manually annotated 2 times for cluster CU1.
- Start number 30 was manually annotated 2 times for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 30 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

- Start number 30 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

- Start number 30 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster CZ:

- Start number 21 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ6:

- Start number 21 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster DA:

- Start number 28 was manually annotated 3 times for cluster DA.

Info for manual annotations of cluster DY:

- Start number 21 was manually annotated 5 times for cluster DY.

Info for manual annotations of cluster EB:

- Start number 30 was manually annotated 61 times for cluster EB.

Info for manual annotations of cluster FA:

- Start number 31 was manually annotated 1 time for cluster FA.

Info for manual annotations of cluster FB:

- Start number 23 was manually annotated 3 times for cluster FB.
- Start number 30 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FO:

- Start number 19 was manually annotated 1 time for cluster FO.
- Start number 23 was manually annotated 2 times for cluster FO.

Info for manual annotations of cluster N:

- Start number 23 was manually annotated 41 times for cluster N.

Gene Information:

Gene: Abidatro_7 Start: 5488, Stop: 6792, Start Num: 23

Candidate Starts for Abidatro_7:

(6, 5380), (Start: 23 @5488 has 59 MA's), (49, 5620), (82, 5824), (88, 5848), (108, 5929), (114, 5965), (129, 6031), (131, 6043), (160, 6214), (194, 6439), (196, 6451), (208, 6553), (229, 6676), (233, 6712), (235, 6721), (238, 6739),

Gene: Abigail_6 Start: 5142, Stop: 6323, Start Num: 30

Candidate Starts for Abigail_6:

(18, 5112), (Start: 30 @5142 has 148 MA's), (42, 5202), (56, 5319), (79, 5403), (110, 5496), (133, 5586), (138, 5613), (163, 5748), (171, 5805), (191, 5955), (214, 6102), (217, 6114), (244, 6300),

Gene: Aggie_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Aggie_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Albanese_8 Start: 7534, Stop: 8784, Start Num: 30

Candidate Starts for Albanese_8:

(Start: 30 @7534 has 148 MA's), (162, 8188), (163, 8191), (187, 8359), (197, 8425), (199, 8431), (205, 8488), (212, 8533), (216, 8566), (223, 8602), (240, 8728), (243, 8752),

Gene: Albedo_6 Start: 5130, Stop: 6311, Start Num: 30

Candidate Starts for Albedo_6:

(Start: 30 @5130 has 148 MA's), (42, 5190), (56, 5307), (79, 5391), (110, 5484), (133, 5574), (138, 5601), (143, 5613), (163, 5736), (171, 5793), (191, 5943), (214, 6090), (217, 6102), (244, 6288),

Gene: Albright_6 Start: 5142, Stop: 6323, Start Num: 30

Candidate Starts for Albright_6:

(18, 5112), (Start: 30 @5142 has 148 MA's), (42, 5202), (56, 5319), (79, 5403), (110, 5496), (133, 5586), (138, 5613), (163, 5748), (171, 5805), (191, 5955), (214, 6102), (217, 6114), (244, 6300),

Gene: Aledel_5 Start: 4834, Stop: 6081, Start Num: 29

Candidate Starts for Aledel_5:

(Start: 29 @4834 has 6 MA's), (50, 4960), (111, 5224), (162, 5485), (163, 5488), (187, 5656), (192, 5689), (198, 5725), (199, 5728), (205, 5785),

Gene: Amelia_8 Start: 5682, Stop: 6995, Start Num: 22

Candidate Starts for Amelia_8:

(Start: 15 @5661 has 5 MA's), (Start: 22 @5682 has 10 MA's), (49, 5814), (70, 5958), (78, 5991), (82, 6018), (114, 6159), (129, 6225), (130, 6234), (136, 6270), (160, 6414), (195, 6648), (197, 6663), (198, 6666), (208, 6753), (214, 6777), (223, 6822), (228, 6870), (229, 6876), (234, 6915), (235, 6921), (238, 6939),

Gene: Anatole_6 Start: 5027, Stop: 6253, Start Num: 30

Candidate Starts for Anatole_6:

(Start: 30 @5027 has 148 MA's), (38, 5057), (46, 5120), (51, 5159), (55, 5198), (57, 5210), (85, 5324), (97, 5345), (121, 5441), (127, 5468), (129, 5480), (133, 5495), (138, 5522), (152, 5588), (161, 5645), (162, 5657), (175, 5738), (192, 5858), (194, 5867), (216, 6032), (222, 6065), (223, 6068), (228, 6119), (242, 6200), (244, 6221),

Gene: Andies_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Andies_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Andrew_7 Start: 5504, Stop: 6814, Start Num: 22

Candidate Starts for Andrew_7:

(Start: 22 @5504 has 10 MA's), (49, 5636), (78, 5813), (82, 5840), (88, 5864), (114, 5981), (129, 6047), (130, 6056), (145, 6146), (160, 6236), (196, 6473), (197, 6485), (208, 6575), (214, 6599), (215, 6605), (228, 6692), (229, 6698), (238, 6761), (244, 6794),

Gene: AnnaLie_7 Start: 5488, Stop: 6669, Start Num: 30

Candidate Starts for AnnaLie_7:

(18, 5458), (Start: 30 @5488 has 148 MA's), (42, 5548), (56, 5665), (79, 5749), (110, 5842), (133, 5932), (138, 5959), (143, 5971), (163, 6094), (171, 6151), (191, 6301), (214, 6448), (217, 6460), (244, 6646),

Gene: Aoka_7 Start: 5916, Stop: 7220, Start Num: 23

Candidate Starts for Aoka_7:

(Start: 23 @5916 has 59 MA's), (32, 5931), (49, 6045), (114, 6390), (233, 7137),

Gene: AppleCider_8 Start: 7477, Stop: 8727, Start Num: 30

Candidate Starts for AppleCider_8:

(Start: 30 @7477 has 148 MA's), (56, 7654), (84, 7786), (111, 7870), (114, 7885), (162, 8131), (163, 8134), (165, 8152), (187, 8302), (199, 8374), (203, 8398), (205, 8431), (212, 8476), (223, 8545), (224, 8554), (244, 8698),

Gene: Archimedes_4 Start: 3855, Stop: 5147, Start Num: 28

Candidate Starts for Archimedes_4:

(25, 3849), (Start: 28 @3855 has 8 MA's), (34, 3867), (172, 4608), (183, 4683), (190, 4740), (216, 4926), (234, 5058), (236, 5070), (238, 5082), (242, 5094),

Gene: Armstrong_5 Start: 5000, Stop: 6190, Start Num: 30

Candidate Starts for Armstrong_5:

(Start: 30 @5000 has 148 MA's), (42, 5060), (56, 5177), (121, 5399), (133, 5456), (134, 5462), (138, 5483), (140, 5492), (173, 5681), (217, 5975), (223, 6008), (242, 6140), (244, 6161), (249, 6185),

Gene: Arroyo_7 Start: 5612, Stop: 6793, Start Num: 30

Candidate Starts for Arroyo_7:

(18, 5582), (Start: 30 @5612 has 148 MA's), (42, 5672), (56, 5789), (79, 5873), (110, 5966), (133, 6056), (138, 6083), (163, 6218), (171, 6275), (191, 6425), (214, 6572), (217, 6584), (244, 6770),

Gene: AustinPowers_5 Start: 4835, Stop: 6082, Start Num: 30

Candidate Starts for AustinPowers_5:

(Start: 30 @4835 has 148 MA's), (50, 4961), (59, 5030), (110, 5216), (111, 5225), (162, 5486), (163, 5489), (187, 5657), (192, 5690), (198, 5726), (199, 5729), (205, 5786),

Gene: AvGardian_6 Start: 5207, Stop: 6391, Start Num: 30

Candidate Starts for AvGardian_6:

(Start: 30 @5207 has 148 MA's), (42, 5267), (47, 5312), (56, 5384), (133, 5654), (138, 5681), (163, 5816), (166, 5837), (191, 6023), (214, 6170), (217, 6182), (242, 6347), (244, 6368),

Gene: Avocadoman_6 Start: 5200, Stop: 6381, Start Num: 30

Candidate Starts for Avocadoman_6:

(18, 5170), (Start: 30 @5200 has 148 MA's), (42, 5260), (56, 5377), (79, 5461), (110, 5554), (133, 5644), (138, 5671), (163, 5806), (171, 5863), (191, 6013), (214, 6160), (217, 6172), (244, 6358),

Gene: B3_6 Start: 5027, Stop: 6253, Start Num: 30

Candidate Starts for B3_6:

(Start: 30 @5027 has 148 MA's), (38, 5057), (46, 5120), (51, 5159), (55, 5198), (57, 5210), (85, 5324), (97, 5345), (121, 5441), (127, 5468), (129, 5480), (133, 5495), (138, 5522), (152, 5588), (161, 5645), (162, 5657), (175, 5738), (192, 5858), (194, 5867), (216, 6032), (222, 6065), (223, 6068), (226, 6095), (228, 6119), (242, 6200), (244, 6221),

Gene: BAjuniper_6 Start: 5180, Stop: 6382, Start Num: 30

Candidate Starts for BAjuniper_6:

(Start: 30 @5180 has 148 MA's), (42, 5240), (56, 5357), (62, 5384), (79, 5450), (117, 5576), (133, 5648), (138, 5675), (148, 5708), (154, 5756), (166, 5831), (172, 5870), (216, 6164), (234, 6296), (244, 6353),

Gene: BFK20_ORF6 Start: 4859, Stop: 6100, Start Num: 40

Candidate Starts for BFK20_ORF6:

(24, 4799), (Start: 30 @4814 has 148 MA's), (40, 4859), (48, 4925), (57, 5000), (63, 5033), (102, 5174), (127, 5300), (129, 5312), (133, 5327), (138, 5354), (142, 5372), (151, 5423), (159, 5477), (162, 5498), (168, 5543), (179, 5618), (187, 5669), (190, 5693), (193, 5708), (206, 5810), (212, 5843), (226, 5939), (231, 5984), (241, 6041), (249, 6089),

Gene: BabeRuth_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for BabeRuth_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: BabyDaisy_7 Start: 5391, Stop: 6572, Start Num: 30

Candidate Starts for BabyDaisy_7:

(Start: 30 @5391 has 148 MA's), (42, 5451), (56, 5568), (79, 5652), (81, 5673), (110, 5745), (133, 5835), (138, 5862), (163, 5997), (191, 6204), (217, 6363), (244, 6549),

Gene: BabyYoda_6 Start: 5401, Stop: 6585, Start Num: 30

Candidate Starts for BabyYoda_6:

(Start: 30 @5401 has 148 MA's), (42, 5461), (47, 5506), (56, 5578), (110, 5758), (133, 5848), (138, 5875), (163, 6010), (171, 6067), (172, 6070), (191, 6217), (217, 6376), (244, 6562),

Gene: Bachaco_6 Start: 5305, Stop: 6501, Start Num: 30

Candidate Starts for Bachaco_6:

(Start: 30 @5305 has 148 MA's), (56, 5482), (79, 5575), (83, 5602), (110, 5668), (133, 5758), (138, 5785), (164, 5929), (166, 5941), (172, 5980), (191, 6127), (217, 6286), (242, 6451),

Gene: Banquo_14 Start: 8387, Stop: 9637, Start Num: 30

Candidate Starts for Banquo_14:

(Start: 30 @8387 has 148 MA's), (41, 8438), (57, 8567), (64, 8594), (79, 8654), (92, 8699), (109, 8756), (110, 8759), (129, 8855), (152, 8963), (157, 8993), (164, 9044), (166, 9056), (172, 9095), (176, 9116), (182, 9164), (190, 9227), (196, 9257), (217, 9413), (223, 9446), (225, 9467), (232, 9530), (234, 9542), (236, 9554),

Gene: Basilisk_7 Start: 5750, Stop: 7054, Start Num: 23

Candidate Starts for Basilisk_7:

(Start: 23 @5750 has 59 MA's), (49, 5882), (82, 6086), (108, 6191), (114, 6227), (129, 6293), (131, 6305), (136, 6338), (160, 6476), (176, 6578), (192, 6692), (194, 6701), (195, 6710), (208, 6815), (219, 6863), (229, 6938), (233, 6974), (238, 7001),

Gene: Bedetta_8 Start: 5682, Stop: 6995, Start Num: 22

Candidate Starts for Bedetta_8:

(Start: 15 @5661 has 5 MA's), (Start: 22 @5682 has 10 MA's), (49, 5814), (70, 5958), (78, 5991), (82, 6018), (114, 6159), (129, 6225), (130, 6234), (136, 6270), (160, 6414), (195, 6648), (197, 6663), (198, 6666), (208, 6753), (214, 6777), (223, 6822), (228, 6870), (229, 6876), (235, 6921), (238, 6939),

Gene: Beethoven_8 Start: 7463, Stop: 8716, Start Num: 30

Candidate Starts for Beethoven_8:

(Start: 30 @7463 has 148 MA's), (110, 7850), (111, 7859), (153, 8066), (162, 8120), (163, 8123), (165, 8141), (175, 8201), (187, 8291), (198, 8360), (199, 8363), (212, 8465), (219, 8513),

Gene: BelmontSKP_7 Start: 5488, Stop: 6669, Start Num: 30

Candidate Starts for BelmontSKP_7:

(18, 5458), (Start: 30 @5488 has 148 MA's), (42, 5548), (56, 5665), (79, 5749), (110, 5842), (133, 5932), (138, 5959), (143, 5971), (163, 6094), (171, 6151), (191, 6301), (214, 6448), (217, 6460), (244, 6646),

Gene: Bennie_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for Bennie_5:

(Start: 30 @4822 has 148 MA's), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (187, 5644), (198, 5713), (199, 5716), (203, 5740), (212, 5818), (219, 5866), (223, 5887),

Gene: Bernstein_5 Start: 5060, Stop: 6250, Start Num: 30

Candidate Starts for Bernstein_5:

(Start: 30 @5060 has 148 MA's), (42, 5120), (56, 5237), (121, 5459), (133, 5516), (134, 5522), (138, 5543), (140, 5552), (173, 5741), (217, 6035), (223, 6068), (242, 6200), (244, 6221), (249, 6245),

Gene: BigMack_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for BigMack_5:

(Start: 30 @4822 has 148 MA's), (59, 5017), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (175, 5554), (187, 5644), (199, 5716), (212, 5818), (219, 5866),

Gene: Bodacious_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for Bodacious_5:

(Start: 30 @4822 has 148 MA's), (59, 5017), (111, 5212), (115, 5230), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (175, 5554), (187, 5644), (198, 5713), (199, 5716), (212, 5818), (219, 5866),

Gene: Bosection6_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Bosection6_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Brahms_5 Start: 5000, Stop: 6190, Start Num: 30

Candidate Starts for Brahms_5:

(Start: 30 @5000 has 148 MA's), (42, 5060), (56, 5177), (121, 5399), (133, 5456), (134, 5462), (138, 5483), (140, 5492), (173, 5681), (217, 5975), (223, 6008), (242, 6140), (244, 6161), (249, 6185),

Gene: BrayBeast_6 Start: 4815, Stop: 6131, Start Num: 23

Candidate Starts for BrayBeast_6:

(16, 4794), (Start: 23 @4815 has 59 MA's), (32, 4830), (49, 4944), (71, 5097), (78, 5121), (82, 5148), (101, 5217), (114, 5295), (122, 5328), (131, 5373), (146, 5463), (194, 5775), (196, 5787), (200, 5814), (203, 5829), (223, 5958), (234, 6051), (242, 6087),

Gene: BrotherBLo_8 Start: 7469, Stop: 8722, Start Num: 30

Candidate Starts for BrotherBLo_8:

(Start: 30 @7469 has 148 MA's), (111, 7865), (127, 7934), (153, 8072), (162, 8126), (163, 8129), (165, 8147), (175, 8207), (187, 8297), (198, 8366), (199, 8369), (212, 8471), (219, 8519), (248, 8714),

Gene: Brynnie_7 Start: 5547, Stop: 6851, Start Num: 23

Candidate Starts for Brynnie_7:

(Start: 23 @5547 has 59 MA's), (49, 5679), (82, 5883), (88, 5907), (108, 5988), (114, 6024), (129, 6090), (131, 6102), (136, 6135), (160, 6273), (176, 6375), (192, 6489), (194, 6498), (195, 6507), (208, 6612), (219, 6660), (229, 6735), (233, 6771), (238, 6798),

Gene: BubbaBear_6 Start: 5130, Stop: 6311, Start Num: 30

Candidate Starts for BubbaBear_6:

(Start: 30 @5130 has 148 MA's), (42, 5190), (56, 5307), (79, 5391), (110, 5484), (133, 5574), (138, 5601), (143, 5613), (163, 5736), (171, 5793), (191, 5943), (214, 6090), (217, 6102), (244, 6288),

Gene: Buldak_6 Start: 5460, Stop: 6674, Start Num: 30

Candidate Starts for Buldak_6:

(Start: 30 @5460 has 148 MA's), (56, 5637), (86, 5772), (107, 5820), (133, 5934), (138, 5961), (163, 6096), (169, 6141), (183, 6231), (190, 6297), (216, 6462), (234, 6594), (238, 6618), (242, 6630), (244, 6651),

Gene: Burritobowl_6 Start: 5140, Stop: 6321, Start Num: 30

Candidate Starts for Burritobowl_6:

(18, 5110), (Start: 30 @5140 has 148 MA's), (42, 5200), (56, 5317), (79, 5401), (110, 5494), (133, 5584), (138, 5611), (163, 5746), (171, 5803), (191, 5953), (214, 6100), (217, 6112), (244, 6298),

Gene: Butters_6 Start: 4369, Stop: 5661, Start Num: 23

Candidate Starts for Butters_6:

(Start: 23 @4369 has 59 MA's), (Start: 28 @4381 has 8 MA's), (45, 4465), (49, 4501), (61, 4597), (71, 4630), (77, 4651), (81, 4678), (82, 4681), (110, 4792), (114, 4822), (119, 4840), (123, 4858), (129, 4888), (130, 4897), (136, 4933), (139, 4957), (146, 4996), (154, 5050), (160, 5083), (164, 5113), (194, 5308), (195, 5317), (198, 5335), (214, 5440), (215, 5446), (228, 5533), (229, 5539), (247, 5647),

Gene: CallieOMalley_8 Start: 7477, Stop: 8727, Start Num: 30

Candidate Starts for CallieOMalley_8:

(Start: 30 @7477 has 148 MA's), (56, 7654), (84, 7786), (111, 7870), (114, 7885), (162, 8131), (163, 8134), (165, 8152), (187, 8302), (199, 8374), (203, 8398), (205, 8431), (212, 8476), (223, 8545), (224, 8554), (240, 8671), (244, 8698),

Gene: Camara_6 Start: 5068, Stop: 6429, Start Num: 9

Candidate Starts for Camara_6:

(9, 5068), (13, 5086), (14, 5095), (Start: 22 @5116 has 10 MA's), (49, 5248), (78, 5425), (82, 5452), (88, 5476), (114, 5593), (129, 5659), (130, 5668), (141, 5743), (160, 5848), (196, 6085), (197, 6097), (200, 6112), (208, 6187), (214, 6211), (215, 6217), (223, 6256), (228, 6304), (229, 6310), (238, 6373), (244, 6406),

Gene: Canowicakte_8 Start: 7512, Stop: 8762, Start Num: 30

Candidate Starts for Canowicakte_8:

(Start: 30 @7512 has 148 MA's), (56, 7689), (84, 7821), (111, 7905), (114, 7920), (162, 8166), (163, 8169), (165, 8187), (187, 8337), (199, 8409), (203, 8433), (205, 8466), (212, 8511), (223, 8580), (224, 8589), (244, 8733),

Gene: Carcharodon_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Carcharodon_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Carpal_8 Start: 7469, Stop: 8722, Start Num: 30

Candidate Starts for Carpal_8:

(Start: 30 @7469 has 148 MA's), (110, 7856), (111, 7865), (153, 8072), (162, 8126), (163, 8129), (165, 8147), (175, 8207), (187, 8297), (198, 8366), (199, 8369), (212, 8471), (219, 8519),

Gene: Cashington_6 Start: 5130, Stop: 6311, Start Num: 30

Candidate Starts for Cashington_6:

(18, 5100), (Start: 30 @5130 has 148 MA's), (42, 5190), (56, 5307), (79, 5391), (110, 5484), (133, 5574), (138, 5601), (163, 5736), (171, 5793), (191, 5943), (214, 6090), (217, 6102), (244, 6288),

Gene: Catfish_9 Start: 6326, Stop: 7576, Start Num: 30

Candidate Starts for Catfish_9:

(Start: 11 @6269 has 4 MA's), (Start: 17 @6287 has 2 MA's), (Start: 30 @6326 has 148 MA's), (48, 6431), (57, 6503), (66, 6533), (79, 6593), (92, 6638), (104, 6680), (137, 6833), (147, 6875), (151, 6905), (164, 6992), (166, 7004), (168, 7025), (172, 7043), (186, 7142), (190, 7175), (198, 7220), (211, 7322), (217, 7361), (226, 7421), (234, 7490), (244, 7547), (245, 7553),

Gene: Celaena_6 Start: 5242, Stop: 6438, Start Num: 30

Candidate Starts for Celaena_6:

(Start: 30 @5242 has 148 MA's), (56, 5419), (79, 5512), (83, 5539), (110, 5605), (133, 5695), (138, 5722), (164, 5866), (166, 5878), (172, 5917), (191, 6064), (217, 6223), (242, 6388),

Gene: Charlie_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Charlie_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: ChewChew_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for ChewChew_5:

(Start: 30 @4822 has 148 MA's), (111, 5212), (115, 5230), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (175, 5554), (187, 5644), (198, 5713), (199, 5716), (212, 5818), (219, 5866),

Gene: Chewbacca_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Chewbacca_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Chickaboom_6 Start: 5194, Stop: 6498, Start Num: 23

Candidate Starts for Chickaboom_6:

(6, 5089), (10, 5155), (16, 5173), (Start: 23 @5194 has 59 MA's), (49, 5326), (82, 5530), (88, 5554), (108, 5635), (114, 5671), (129, 5737), (131, 5749), (136, 5782), (160, 5920), (194, 6145), (196, 6157), (208, 6259), (214, 6283), (219, 6307), (228, 6376), (229, 6382), (233, 6418), (238, 6445),

Gene: ChiliPepper_6 Start: 5395, Stop: 6588, Start Num: 30

Candidate Starts for ChiliPepper_6:

(Start: 30 @5395 has 148 MA's), (42, 5455), (133, 5851), (138, 5878), (151, 5938), (163, 6013), (164, 6022), (171, 6070), (172, 6073), (191, 6220), (217, 6379), (242, 6544), (244, 6565),

Gene: Cholula_8 Start: 7514, Stop: 8767, Start Num: 30

Candidate Starts for Cholula_8:

(Start: 30 @7514 has 148 MA's), (110, 7901), (111, 7910), (153, 8117), (162, 8171), (163, 8174), (165, 8192), (175, 8252), (187, 8342), (198, 8411), (199, 8414), (212, 8516), (219, 8564),

Gene: Chridison_5 Start: 4835, Stop: 6082, Start Num: 30

Candidate Starts for Chridison_5:

(Start: 30 @4835 has 148 MA's), (50, 4961), (59, 5030), (110, 5216), (111, 5225), (162, 5486), (163, 5489), (187, 5657), (192, 5690), (198, 5726), (199, 5729), (205, 5786),

Gene: Christian_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for Christian_5:

(Start: 30 @4822 has 148 MA's), (84, 5128), (111, 5212), (115, 5230), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (175, 5554), (187, 5644), (198, 5713), (199, 5716), (212, 5818), (219, 5866),

Gene: Clayda5_5 Start: 5000, Stop: 6190, Start Num: 30

Candidate Starts for Clayda5_5:

(Start: 30 @5000 has 148 MA's), (42, 5060), (56, 5177), (121, 5399), (133, 5456), (134, 5462), (138, 5483), (140, 5492), (173, 5681), (217, 5975), (223, 6008), (242, 6140), (244, 6161), (249, 6185),

Gene: CliffHanger_7 Start: 5253, Stop: 6458, Start Num: 29

Candidate Starts for CliffHanger_7:

(Start: 29 @5253 has 6 MA's), (50, 5379), (56, 5430), (69, 5490), (121, 5664), (133, 5721), (151, 5808), (157, 5841), (163, 5883), (200, 6144), (217, 6249), (234, 6378),

Gene: CocoCinnamon_9 Start: 5985, Stop: 7304, Start Num: 23

Candidate Starts for CocoCinnamon_9:

(Start: 23 @5985 has 59 MA's), (32, 6000), (49, 6114), (71, 6267), (82, 6318), (101, 6393), (110, 6441), (114, 6471), (136, 6582), (194, 6951), (219, 7110), (223, 7131), (234, 7224),

Gene: Coltrane_5 Start: 5000, Stop: 6190, Start Num: 30

Candidate Starts for Coltrane_5:

(Start: 30 @5000 has 148 MA's), (42, 5060), (56, 5177), (121, 5399), (133, 5456), (134, 5462), (138, 5483), (140, 5492), (173, 5681), (217, 5975), (223, 6008), (242, 6140), (244, 6161), (249, 6185),

Gene: Colusalem_7 Start: 5521, Stop: 6834, Start Num: 22

Candidate Starts for Colusalem_7:

(Start: 15 @5500 has 5 MA's), (Start: 22 @5521 has 10 MA's), (49, 5653), (70, 5797), (78, 5830), (82, 5857), (114, 5998), (129, 6064), (130, 6073), (136, 6109), (160, 6253), (195, 6487), (197, 6502), (198, 6505), (208, 6592), (214, 6616), (223, 6661), (228, 6709), (229, 6715), (234, 6754), (235, 6760), (238, 6778),

Gene: Coral_7 Start: 5500, Stop: 6834, Start Num: 15

Candidate Starts for Coral_7:

(Start: 15 @5500 has 5 MA's), (Start: 22 @5521 has 10 MA's), (49, 5653), (70, 5797), (78, 5830), (82, 5857), (114, 5998), (129, 6064), (130, 6073), (136, 6109), (160, 6253), (195, 6487), (197, 6502), (198, 6505), (208, 6592), (214, 6616), (223, 6661), (228, 6709), (229, 6715), (234, 6754), (235, 6760), (238, 6778),

Gene: Cote_8 Start: 5661, Stop: 6995, Start Num: 15

Candidate Starts for Cote_8:

(Start: 15 @5661 has 5 MA's), (Start: 22 @5682 has 10 MA's), (49, 5814), (70, 5958), (78, 5991), (82, 6018), (114, 6159), (129, 6225), (130, 6234), (136, 6270), (160, 6414), (195, 6648), (197, 6663), (198, 6666), (208, 6753), (214, 6777), (223, 6822), (228, 6870), (229, 6876), (234, 6915), (235, 6921), (238, 6939),

Gene: CristinaYang_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for CristinaYang_5:

(Start: 30 @4822 has 148 MA's), (59, 5017), (111, 5212), (115, 5230), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (175, 5554), (187, 5644), (198, 5713), (199, 5716), (212, 5818), (219, 5866),

Gene: CroZenni_6 Start: 5142, Stop: 6323, Start Num: 30

Candidate Starts for CroZenni_6:

(18, 5112), (Start: 30 @5142 has 148 MA's), (42, 5202), (56, 5319), (79, 5403), (110, 5496), (133, 5586), (138, 5613), (143, 5625), (163, 5748), (171, 5805), (191, 5955), (214, 6102), (217, 6114), (244, 6300),

Gene: Daiboju_5 Start: 4834, Stop: 6081, Start Num: 30

Candidate Starts for Daiboju_5:

(Start: 30 @4834 has 148 MA's), (50, 4960), (81, 5128), (110, 5215), (162, 5485), (163, 5488), (175, 5566), (187, 5656), (199, 5728), (205, 5785), (216, 5863), (223, 5899),

Gene: Daob_8 Start: 5664, Stop: 6998, Start Num: 15

Candidate Starts for Daob_8:

(Start: 15 @5664 has 5 MA's), (Start: 22 @5685 has 10 MA's), (49, 5817), (70, 5961), (78, 5994), (82, 6021), (114, 6162), (129, 6228), (130, 6237), (136, 6273), (160, 6417), (195, 6651), (197, 6666), (198, 6669), (208, 6756), (214, 6780), (223, 6825), (228, 6873), (229, 6879), (234, 6918), (235, 6924), (238, 6942),

Gene: Dardanus_12 Start: 7394, Stop: 8644, Start Num: 30

Candidate Starts for Dardanus_12:

(Start: 17 @7361 has 2 MA's), (20, 7376), (Start: 30 @7394 has 148 MA's), (38, 7424), (41, 7445), (57, 7580), (64, 7607), (79, 7664), (84, 7697), (92, 7709), (109, 7766), (113, 7793), (129, 7865), (152, 7973), (157, 8003), (164, 8054), (172, 8105), (176, 8126), (179, 8162), (190, 8237), (196, 8267), (198, 8282), (207, 8360), (211, 8384), (225, 8477), (234, 8552), (245, 8615), (246, 8621),

Gene: DickRichards_6 Start: 5607, Stop: 6788, Start Num: 30

Candidate Starts for DickRichards_6:

(18, 5577), (Start: 30 @5607 has 148 MA's), (42, 5667), (56, 5784), (79, 5868), (110, 5961), (133, 6051), (138, 6078), (163, 6213), (171, 6270), (191, 6420), (214, 6567), (217, 6579), (244, 6765),

Gene: Didgeridoo_7 Start: 5391, Stop: 6572, Start Num: 30

Candidate Starts for Didgeridoo_7:

(Start: 30 @5391 has 148 MA's), (42, 5451), (56, 5568), (79, 5652), (81, 5673), (110, 5745), (133, 5835), (138, 5862), (163, 5997), (191, 6204), (217, 6363), (244, 6549),

Gene: Dino_8 Start: 7469, Stop: 8722, Start Num: 30

Candidate Starts for Dino_8:

(Start: 30 @7469 has 148 MA's), (110, 7856), (111, 7865), (153, 8072), (162, 8126), (163, 8129), (165, 8147), (175, 8207), (187, 8297), (198, 8366), (199, 8369), (212, 8471), (219, 8519),

Gene: DinoDaryn_12 Start: 7418, Stop: 8725, Start Num: 11

Candidate Starts for DinoDaryn_12:

(Start: 11 @7418 has 4 MA's), (Start: 17 @7436 has 2 MA's), (Start: 30 @7469 has 148 MA's), (33, 7475), (57, 7649), (62, 7670), (64, 7676), (79, 7739), (92, 7784), (127, 7928), (133, 7955), (147, 8012), (164, 8129), (166, 8141), (168, 8162), (183, 8255), (197, 8357), (199, 8363), (207, 8438), (216, 8498), (222, 8531), (226, 8561), (227, 8579), (230, 8597), (234, 8630), (236, 8642),

Gene: DirtyBubble_6 Start: 5400, Stop: 6584, Start Num: 30

Candidate Starts for DirtyBubble_6:

(Start: 30 @5400 has 148 MA's), (42, 5460), (47, 5505), (56, 5577), (110, 5757), (133, 5847), (138, 5874), (163, 6009), (171, 6066), (172, 6069), (191, 6216), (217, 6375), (244, 6561),

Gene: Dismas_6 Start: 5395, Stop: 6588, Start Num: 30

Candidate Starts for Dismas_6:

(Start: 30 @5395 has 148 MA's), (42, 5455), (133, 5851), (138, 5878), (151, 5938), (163, 6013), (164, 6022), (171, 6070), (172, 6073), (191, 6220), (217, 6379), (242, 6544), (244, 6565),

Gene: DonkeyMan_6 Start: 4491, Stop: 5804, Start Num: 21

Candidate Starts for DonkeyMan_6:

(Start: 21 @4491 has 9 MA's), (36, 4530), (45, 4593), (49, 4629), (75, 4794), (114, 4974), (124, 5016), (128, 5037), (131, 5052), (146, 5142), (160, 5229), (165, 5268), (180, 5370), (188, 5418), (199, 5484), (201, 5499), (208, 5562), (228, 5679), (242, 5760),

Gene: Doobus_6 Start: 5364, Stop: 6545, Start Num: 30

Candidate Starts for Doobus_6:

(18, 5334), (Start: 30 @5364 has 148 MA's), (42, 5424), (56, 5541), (79, 5625), (110, 5718), (133, 5808), (138, 5835), (163, 5970), (171, 6027), (191, 6177), (214, 6324), (217, 6336), (244, 6522),

Gene: DrRobert_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for DrRobert_5:

(Start: 30 @4822 has 148 MA's), (84, 5128), (111, 5212), (115, 5230), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (175, 5554), (187, 5644), (198, 5713), (199, 5716), (212, 5818), (219, 5866),

Gene: DreamTeam_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for DreamTeam_5:

(Start: 30 @4822 has 148 MA's), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (187, 5644), (198, 5713), (199, 5716), (210, 5812), (212, 5818), (219, 5866),

Gene: Duplicity_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Duplicity_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: E1_6 Start: 5027, Stop: 6253, Start Num: 30

Candidate Starts for E1_6:

(Start: 30 @5027 has 148 MA's), (38, 5057), (46, 5120), (51, 5159), (55, 5198), (57, 5210), (85, 5324), (97, 5345), (121, 5441), (127, 5468), (129, 5480), (133, 5495), (138, 5522), (152, 5588), (161, 5645), (162, 5657), (175, 5738), (192, 5858), (194, 5867), (216, 6032), (222, 6065), (223, 6068), (228, 6119), (242, 6200), (244, 6221),

Gene: Eden_5 Start: 5055, Stop: 6242, Start Num: 30

Candidate Starts for Eden_5:

(Start: 30 @5055 has 148 MA's), (56, 5232), (65, 5268), (121, 5448), (133, 5505), (138, 5532), (202, 5940), (216, 6030), (221, 6060), (238, 6186), (242, 6198), (245, 6225),

Gene: Eesa_7 Start: 5714, Stop: 7018, Start Num: 23

Candidate Starts for Eesa_7:

(Start: 23 @5714 has 59 MA's), (49, 5846), (82, 6050), (88, 6071), (108, 6152), (114, 6188), (129, 6254), (131, 6266), (148, 6359), (160, 6437), (196, 6674), (208, 6776), (214, 6800), (219, 6824), (229, 6899), (233, 6935), (238, 6962),

Gene: Elener_7 Start: 6676, Stop: 8010, Start Num: 27

Candidate Starts for Elener_7:

(27, 6676), (39, 6718), (49, 6796), (76, 6967), (91, 7051), (96, 7063), (120, 7183), (129, 7228), (132, 7243), (157, 7399), (160, 7420), (216, 7801), (225, 7858), (242, 7966), (245, 7993), (246, 7999),

Gene: Elva_7 Start: 5469, Stop: 6656, Start Num: 30

Candidate Starts for Elva_7:

(Start: 30 @5469 has 148 MA's), (42, 5529), (47, 5574), (56, 5646), (110, 5829), (133, 5919), (138, 5946), (163, 6081), (171, 6138), (172, 6141), (191, 6288), (217, 6447), (234, 6576), (242, 6612), (244, 6633),

Gene: EstebanJulior_5 Start: 4813, Stop: 6063, Start Num: 30

Candidate Starts for EstebanJulior_5:

(Start: 30 @4813 has 148 MA's), (153, 5413), (162, 5467), (163, 5470), (165, 5488), (187, 5638), (198, 5707), (199, 5710), (203, 5734), (212, 5812), (219, 5860),

Gene: Eula_6 Start: 5127, Stop: 6308, Start Num: 30

Candidate Starts for Eula_6:

(Start: 30 @5127 has 148 MA's), (42, 5187), (56, 5304), (79, 5388), (110, 5481), (133, 5571), (138, 5598), (143, 5610), (163, 5733), (171, 5790), (191, 5940), (214, 6087), (217, 6099), (244, 6285),

Gene: Eunoia_5 Start: 4834, Stop: 6081, Start Num: 29

Candidate Starts for Eunoia_5:

(Start: 29 @4834 has 6 MA's), (50, 4960), (111, 5224), (162, 5485), (163, 5488), (187, 5656), (192, 5689), (198, 5725), (199, 5728), (205, 5785),

Gene: EvenBluerMoon_7 Start: 5914, Stop: 7218, Start Num: 23

Candidate Starts for EvenBluerMoon_7:

(Start: 23 @5914 has 59 MA's), (32, 5929), (49, 6043), (114, 6388), (233, 7135),

Gene: Faith5x5_6 Start: 4347, Stop: 5654, Start Num: 21

Candidate Starts for Faith5x5_6:

(Start: 21 @4347 has 9 MA's), (45, 4443), (49, 4479), (58, 4551), (59, 4557), (71, 4632), (74, 4641), (82, 4683), (95, 4725), (99, 4740), (114, 4824), (124, 4866), (135, 4932), (136, 4935), (146, 4992), (157, 5058), (160, 5079), (195, 5313), (215, 5442), (229, 5535), (233, 5571), (238, 5598),

Gene: Finalfrontier_7 Start: 5633, Stop: 6814, Start Num: 30

Candidate Starts for Finalfrontier_7:

(Start: 30 @5633 has 148 MA's), (42, 5693), (56, 5810), (79, 5894), (110, 5987), (133, 6077), (138, 6104), (143, 6116), (163, 6239), (171, 6296), (191, 6446), (214, 6593), (217, 6605), (244, 6791),

Gene: FlameThrower_6 Start: 5238, Stop: 6434, Start Num: 30

Candidate Starts for FlameThrower_6:

(Start: 30 @5238 has 148 MA's), (56, 5415), (79, 5508), (110, 5601), (133, 5691), (138, 5718), (143, 5730), (164, 5862), (166, 5874), (172, 5913), (191, 6060), (217, 6219), (242, 6384),

Gene: Fluke_8 Start: 7510, Stop: 8763, Start Num: 30

Candidate Starts for Fluke_8:

(Start: 30 @7510 has 148 MA's), (110, 7897), (111, 7906), (153, 8113), (162, 8167), (163, 8170), (165, 8188), (175, 8248), (187, 8338), (198, 8407), (199, 8410), (212, 8512), (219, 8560),

Gene: Franklin22_5 Start: 5054, Stop: 6241, Start Num: 30

Candidate Starts for Franklin22_5:

(Start: 30 @5054 has 148 MA's), (41, 5105), (42, 5114), (56, 5231), (59, 5249), (65, 5270), (79, 5321), (121, 5447), (133, 5504), (138, 5531), (140, 5540), (171, 5723), (172, 5726), (182, 5795), (202, 5939), (217, 6032), (227, 6110), (245, 6224),

Gene: Frizzle_4 Start: 3898, Stop: 5187, Start Num: 28

Candidate Starts for Frizzle_4:

(Start: 28 @3898 has 8 MA's), (104, 4267), (167, 4609), (172, 4639), (189, 4759), (198, 4816), (219, 4972), (231, 5065), (234, 5089), (236, 5101), (244, 5146),

Gene: Fulbright_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Fulbright_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Gack_5 Start: 5108, Stop: 6304, Start Num: 30

Candidate Starts for Gack_5:

(Start: 30 @5108 has 148 MA's), (56, 5285), (79, 5384), (121, 5510), (133, 5567), (138, 5594), (143, 5606), (166, 5750), (202, 6002), (217, 6095), (242, 6260), (245, 6287),

Gene: Galaxy_7 Start: 5497, Stop: 6804, Start Num: 23

Candidate Starts for Galaxy_7:

(6, 5389), (Start: 23 @5497 has 59 MA's), (49, 5629), (70, 5773), (82, 5833), (88, 5860), (108, 5941), (114, 5977), (129, 6043), (131, 6055), (136, 6088), (160, 6226), (196, 6463), (198, 6478), (208, 6565), (229, 6688), (233, 6724), (235, 6733), (238, 6751),

Gene: Gex_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Gex_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Ghobes_4 Start: 3898, Stop: 5187, Start Num: 28

Candidate Starts for Ghobes_4:

(Start: 28 @3898 has 8 MA's), (104, 4267), (167, 4609), (172, 4639), (189, 4759), (198, 4816), (219, 4972), (231, 5065), (234, 5089), (236, 5101), (244, 5146),

Gene: Gisselle_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for Gisselle_5:

(Start: 30 @4822 has 148 MA's), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (187, 5644), (198, 5713), (199, 5716), (210, 5812), (212, 5818), (219, 5866),

Gene: Glenn_8 Start: 7520, Stop: 8773, Start Num: 30

Candidate Starts for Glenn_8:

(Start: 30 @7520 has 148 MA's), (110, 7907), (111, 7916), (153, 8123), (162, 8177), (163, 8180), (165, 8198), (175, 8258), (187, 8348), (198, 8417), (199, 8420), (212, 8522), (219, 8570),

Gene: Goib_11 Start: 7193, Stop: 8500, Start Num: 11

Candidate Starts for Goib_11:

(Start: 11 @7193 has 4 MA's), (Start: 17 @7211 has 2 MA's), (Start: 30 @7244 has 148 MA's), (33, 7250), (57, 7424), (62, 7445), (64, 7451), (79, 7514), (92, 7559), (133, 7730), (147, 7787), (164, 7904), (166, 7916), (168, 7937), (172, 7955), (183, 8030), (197, 8132), (199, 8138), (207, 8213), (211, 8237), (216, 8273), (222, 8306), (226, 8336), (227, 8354), (230, 8372), (234, 8405), (236, 8417),

Gene: GreenHearts_8 Start: 7534, Stop: 8784, Start Num: 30

Candidate Starts for GreenHearts_8:

(Start: 30 @7534 has 148 MA's), (94, 7864), (162, 8188), (163, 8191), (187, 8359), (197, 8425), (199, 8431), (205, 8488), (212, 8533), (216, 8566), (223, 8602), (240, 8728), (243, 8752),

Gene: Greenhouse_8 Start: 7503, Stop: 8753, Start Num: 30

Candidate Starts for Greenhouse_8:

(Start: 30 @7503 has 148 MA's), (162, 8157), (163, 8160), (187, 8328), (197, 8394), (199, 8400), (205, 8457), (212, 8502), (216, 8535), (223, 8571), (226, 8598), (240, 8697), (243, 8721),

Gene: Gspu1_8 Start: 5827, Stop: 7071, Start Num: 30

Candidate Starts for Gspu1_8:

(8, 5728), (Start: 17 @5794 has 2 MA's), (Start: 30 @5827 has 148 MA's), (41, 5878), (51, 5956), (55, 5995), (57, 6007), (79, 6094), (92, 6139), (137, 6325), (147, 6367), (151, 6397), (164, 6484), (166, 6496), (168, 6517), (172, 6535), (175, 6553), (178, 6586), (183, 6610), (189, 6658), (191, 6676), (197, 6712), (199, 6718), (207, 6793), (216, 6853), (222, 6886), (226, 6916), (227, 6934), (230, 6952), (232, 6973), (234, 6985), (242, 7021), (244, 7042),

Gene: Gudmit_7 Start: 5118, Stop: 6437, Start Num: 23

Candidate Starts for Gudmit_7:

(Start: 23 @5118 has 59 MA's), (Start: 28 @5130 has 8 MA's), (49, 5253), (58, 5325), (81, 5454), (82, 5457), (88, 5493), (95, 5511), (101, 5532), (136, 5721), (153, 5829), (157, 5844), (160, 5865), (170, 5940), (194, 6090), (197, 6114), (199, 6120), (225, 6288), (229, 6321), (244, 6417),

Gene: Gustav_5 Start: 4544, Stop: 5788, Start Num: 28

Candidate Starts for Gustav_5:

(Start: 28 @4544 has 8 MA's), (41, 4595), (138, 5054), (143, 5066), (148, 5087), (155, 5141), (161, 5177), (172, 5252), (183, 5327), (189, 5375), (190, 5387), (192, 5396), (216, 5570), (226, 5633), (228, 5657), (234, 5702), (238, 5726), (242, 5738),

Gene: Hanako_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for Hanako_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: HannahPhantana_8 Start: 5664, Stop: 6998, Start Num: 15

Candidate Starts for HannahPhantana_8:

(Start: 15 @5664 has 5 MA's), (Start: 22 @5685 has 10 MA's), (49, 5817), (70, 5961), (78, 5994), (82, 6021), (114, 6162), (129, 6228), (130, 6237), (136, 6273), (160, 6417), (195, 6651), (197, 6666), (198, 6669), (208, 6756), (214, 6780), (223, 6825), (228, 6873), (229, 6879), (235, 6924), (238, 6942),

Gene: HeadNerd_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for HeadNerd_5:

(Start: 30 @4822 has 148 MA's), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (187, 5644), (198, 5713), (199, 5716), (203, 5740), (212, 5818), (219, 5866), (223, 5887),

Gene: Heinz_6 Start: 4491, Stop: 5804, Start Num: 21

Candidate Starts for Heinz_6:

(Start: 21 @4491 has 9 MA's), (36, 4530), (45, 4593), (49, 4629), (75, 4794), (114, 4974), (124, 5016), (131, 5052), (136, 5085), (160, 5229), (165, 5268), (180, 5370), (188, 5418), (199, 5484), (201, 5499), (208, 5562), (242, 5760),

Gene: Herb_5 Start: 4834, Stop: 6081, Start Num: 30

Candidate Starts for Herb_5:

(Start: 30 @4834 has 148 MA's), (50, 4960), (81, 5128), (110, 5215), (162, 5485), (163, 5488), (175, 5566), (187, 5656), (199, 5728), (205, 5785), (216, 5863), (223, 5899),

Gene: Hibiscus_6 Start: 4495, Stop: 5808, Start Num: 21

Candidate Starts for Hibiscus_6:

(4, 4204), (5, 4378), (Start: 21 @4495 has 9 MA's), (36, 4534), (45, 4597), (49, 4633), (75, 4798), (114, 4978), (124, 5020), (131, 5056), (160, 5233), (165, 5272), (180, 5374), (188, 5422), (201, 5503), (208, 5566), (228, 5683), (242, 5764),

Gene: Huckleberry_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for Huckleberry_5:

(Start: 30 @4822 has 148 MA's), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (187, 5644), (198, 5713), (199, 5716), (203, 5740), (212, 5818), (219, 5866), (223, 5887),

Gene: Huff_12 Start: 7418, Stop: 8725, Start Num: 11

Candidate Starts for Huff_12:

(Start: 11 @7418 has 4 MA's), (Start: 17 @7436 has 2 MA's), (Start: 30 @7469 has 148 MA's), (33, 7475), (57, 7649), (62, 7670), (64, 7676), (79, 7739), (92, 7784), (127, 7928), (133, 7955), (147, 8012), (164, 8129), (166, 8141), (168, 8162), (183, 8255), (197, 8357), (199, 8363), (207, 8438), (216, 8498), (222, 8531), (226, 8561), (227, 8579), (230, 8597), (234, 8630), (236, 8642),

Gene: HunterDalle_5 Start: 4834, Stop: 6081, Start Num: 29

Candidate Starts for HunterDalle_5:

(Start: 29 @4834 has 6 MA's), (50, 4960), (111, 5224), (162, 5485), (163, 5488), (187, 5656), (192, 5689), (198, 5725), (199, 5728), (205, 5785),

Gene: Huntingdon_8 Start: 7482, Stop: 8732, Start Num: 30

Candidate Starts for Huntingdon_8:

(Start: 30 @7482 has 148 MA's), (125, 7938), (162, 8136), (163, 8139), (187, 8307), (197, 8373), (199, 8379), (205, 8436), (211, 8478), (212, 8481), (216, 8514), (223, 8550), (240, 8676), (243, 8700),

Gene: Icarian_7 Start: 5389, Stop: 6576, Start Num: 30

Candidate Starts for Icarian_7:

(Start: 30 @5389 has 148 MA's), (42, 5449), (47, 5494), (56, 5566), (110, 5749), (133, 5839), (138, 5866), (144, 5887), (163, 6001), (171, 6058), (172, 6061), (191, 6208), (217, 6367), (242, 6532), (244, 6553),

Gene: Immaculata_8 Start: 7514, Stop: 8767, Start Num: 30

Candidate Starts for Immaculata_8:

(Start: 30 @7514 has 148 MA's), (110, 7901), (111, 7910), (153, 8117), (162, 8171), (163, 8174), (165, 8192), (175, 8252), (187, 8342), (198, 8411), (199, 8414), (212, 8516), (219, 8564),

Gene: IndyLu_6 Start: 5215, Stop: 6396, Start Num: 30

Candidate Starts for IndyLu_6:

(Start: 30 @5215 has 148 MA's), (42, 5275), (56, 5392), (79, 5476), (81, 5497), (110, 5569), (133, 5659), (138, 5686), (163, 5821), (191, 6028), (217, 6187), (244, 6373),

Gene: Jamie19_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for Jamie19_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: Jamun_7 Start: 5765, Stop: 7069, Start Num: 23

Candidate Starts for Jamun_7:

(6, 5660), (10, 5726), (16, 5744), (Start: 23 @5765 has 59 MA's), (49, 5897), (82, 6101), (88, 6125), (108, 6206), (114, 6242), (129, 6308), (131, 6320), (136, 6353), (160, 6491), (176, 6593), (194, 6716), (195, 6725), (208, 6830), (219, 6878), (228, 6947), (229, 6953), (233, 6989), (238, 7016),

Gene: JanetJ_7 Start: 5692, Stop: 6999, Start Num: 23

Candidate Starts for JanetJ_7:

(Start: 23 @5692 has 59 MA's), (32, 5710), (49, 5824), (114, 6169), (149, 6340), (214, 6781), (233, 6916),

Gene: Jerole_8 Start: 5682, Stop: 6995, Start Num: 22

Candidate Starts for Jerole_8:

(Start: 15 @5661 has 5 MA's), (Start: 22 @5682 has 10 MA's), (49, 5814), (70, 5958), (78, 5991), (82, 6018), (114, 6159), (129, 6225), (130, 6234), (136, 6270), (160, 6414), (195, 6648), (197, 6663), (198, 6666), (208, 6753), (214, 6777), (223, 6822), (228, 6870), (229, 6876), (235, 6921), (238, 6939),

Gene: Joann_8 Start: 7474, Stop: 8724, Start Num: 30

Candidate Starts for Joann_8:

(Start: 30 @7474 has 148 MA's), (94, 7804), (162, 8128), (163, 8131), (187, 8299), (197, 8365), (199, 8371), (205, 8428), (212, 8473), (216, 8506), (223, 8542), (240, 8668),

Gene: Johnathan_6 Start: 5142, Stop: 6323, Start Num: 30

Candidate Starts for Johnathan_6:

(18, 5112), (Start: 30 @5142 has 148 MA's), (42, 5202), (56, 5319), (79, 5403), (110, 5496), (133, 5586), (138, 5613), (163, 5748), (171, 5805), (191, 5955), (214, 6102), (217, 6114), (244, 6300),

Gene: Jojo24_6 Start: 4490, Stop: 5803, Start Num: 21

Candidate Starts for Jojo24_6:

(1, 3665), (4, 4199), (5, 4373), (Start: 21 @4490 has 9 MA's), (36, 4529), (45, 4592), (49, 4628), (75, 4793), (114, 4973), (124, 5015), (131, 5051), (160, 5228), (165, 5267), (180, 5369), (188, 5417), (201, 5498), (208, 5561), (228, 5678), (242, 5759),

Gene: Journey_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Journey_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Jovita_6 Start: 5253, Stop: 6434, Start Num: 30

Candidate Starts for Jovita_6:

(Start: 30 @5253 has 148 MA's), (42, 5313), (56, 5430), (79, 5514), (110, 5607), (133, 5697), (138, 5724), (163, 5859), (171, 5916), (191, 6066), (214, 6213), (217, 6225), (244, 6411),

Gene: Jumboset_8 Start: 7463, Stop: 8716, Start Num: 30

Candidate Starts for Jumboset_8:

(Start: 30 @7463 has 148 MA's), (110, 7850), (111, 7859), (153, 8066), (162, 8120), (163, 8123), (165, 8141), (175, 8201), (187, 8291), (198, 8360), (199, 8363), (212, 8465), (219, 8513),

Gene: Juno112_6 Start: 5116, Stop: 6429, Start Num: 22

Candidate Starts for Juno112_6:

(9, 5068), (13, 5086), (14, 5095), (Start: 22 @5116 has 10 MA's), (49, 5248), (78, 5425), (82, 5452), (88, 5476), (114, 5593), (129, 5659), (130, 5668), (141, 5743), (160, 5848), (196, 6085), (197, 6097), (200, 6112), (208, 6187), (214, 6211), (215, 6217), (223, 6256), (228, 6304), (229, 6310), (238, 6373), (244, 6406),

Gene: KHumphrey_6 Start: 5115, Stop: 6428, Start Num: 22

Candidate Starts for KHumphrey_6:

(9, 5067), (13, 5085), (14, 5094), (Start: 22 @5115 has 10 MA's), (49, 5247), (78, 5424), (82, 5451), (88, 5475), (114, 5592), (129, 5658), (130, 5667), (141, 5742), (160, 5847), (196, 6084), (197, 6096), (200, 6111), (208, 6186), (214, 6210), (215, 6216), (223, 6255), (228, 6303), (229, 6309), (238, 6372), (244, 6405),

Gene: Kalizoi_8 Start: 7463, Stop: 8716, Start Num: 30

Candidate Starts for Kalizoi_8:

(Start: 30 @7463 has 148 MA's), (110, 7850), (111, 7859), (153, 8066), (162, 8120), (163, 8123), (165, 8141), (175, 8201), (187, 8291), (198, 8360), (199, 8363), (212, 8465), (219, 8513),

Gene: Kate33_6 Start: 5215, Stop: 6396, Start Num: 30

Candidate Starts for Kate33_6:

(Start: 30 @5215 has 148 MA's), (42, 5275), (56, 5392), (79, 5476), (81, 5497), (110, 5569), (133, 5659), (138, 5686), (163, 5821), (191, 6028), (217, 6187), (244, 6373),

Gene: Katzastrophic_6 Start: 5305, Stop: 6501, Start Num: 30

Candidate Starts for Katzastrophic_6:

(Start: 30 @5305 has 148 MA's), (56, 5482), (79, 5575), (83, 5602), (110, 5668), (133, 5758), (138, 5785), (164, 5929), (166, 5941), (172, 5980), (191, 6127), (217, 6286), (242, 6451),

Gene: Kenzers_6 Start: 5130, Stop: 6311, Start Num: 30

Candidate Starts for Kenzers_6:

(18, 5100), (Start: 30 @5130 has 148 MA's), (42, 5190), (56, 5307), (79, 5391), (110, 5484), (133, 5574), (138, 5601), (143, 5613), (163, 5736), (171, 5793), (191, 5943), (214, 6090), (217, 6102), (244, 6288),

Gene: Kepler_7 Start: 5520, Stop: 6833, Start Num: 22

Candidate Starts for Kepler_7:

(Start: 15 @5499 has 5 MA's), (Start: 22 @5520 has 10 MA's), (49, 5652), (70, 5796), (78, 5829), (82, 5856), (114, 5997), (129, 6063), (130, 6072), (136, 6108), (160, 6252), (195, 6486), (197, 6501), (198, 6504), (208, 6591), (214, 6615), (223, 6660), (228, 6708), (229, 6714), (234, 6753), (235, 6759), (238, 6777),

Gene: Kevin1_6 Start: 4369, Stop: 5661, Start Num: 23

Candidate Starts for Kevin1_6:

(Start: 23 @4369 has 59 MA's), (Start: 28 @4381 has 8 MA's), (45, 4465), (49, 4501), (55, 4558), (61, 4597), (71, 4630), (77, 4651), (81, 4678), (82, 4681), (110, 4792), (114, 4822), (119, 4840), (123, 4858), (129, 4888), (130, 4897), (136, 4933), (139, 4957), (146, 4996), (154, 5050), (160, 5083), (164, 5113), (194, 5308), (195, 5317), (198, 5335), (214, 5440), (215, 5446), (228, 5533), (229, 5539), (247, 5647),

Gene: Khuang_5 Start: 4284, Stop: 5510, Start Num: 27

Candidate Starts for Khuang_5:

(27, 4284), (35, 4302), (49, 4404), (53, 4446), (60, 4482), (79, 4545), (121, 4689), (138, 4770), (162, 4908), (198, 5148), (200, 5160), (228, 5373), (233, 5415), (234, 5418),

Gene: Kieran_6 Start: 5395, Stop: 6588, Start Num: 30

Candidate Starts for Kieran_6:

(Start: 30 @5395 has 148 MA's), (42, 5455), (133, 5851), (138, 5878), (151, 5938), (163, 6013), (164, 6022), (171, 6070), (172, 6073), (191, 6220), (217, 6379), (242, 6544), (244, 6565),

Gene: KingBob_5 Start: 4834, Stop: 6081, Start Num: 30

Candidate Starts for KingBob_5:

(Start: 30 @4834 has 148 MA's), (50, 4960), (81, 5128), (110, 5215), (162, 5485), (163, 5488), (175, 5566), (187, 5656), (199, 5728), (205, 5785), (216, 5863), (223, 5899),

Gene: Kittykat_5 Start: 4819, Stop: 6066, Start Num: 30

Candidate Starts for Kittykat_5:

(Start: 30 @4819 has 148 MA's), (153, 5416), (162, 5470), (163, 5473), (165, 5491), (187, 5641), (198, 5710), (199, 5713), (210, 5809), (212, 5815), (219, 5863),

Gene: Korra_8 Start: 7469, Stop: 8722, Start Num: 30

Candidate Starts for Korra_8:

(Start: 30 @7469 has 148 MA's), (110, 7856), (111, 7865), (153, 8072), (162, 8126), (163, 8129), (165, 8147), (175, 8207), (187, 8297), (198, 8366), (199, 8369), (212, 8471), (219, 8519),

Gene: Kuleana_7 Start: 5487, Stop: 6806, Start Num: 22

Candidate Starts for Kuleana_7:

(Start: 22 @5487 has 10 MA's), (49, 5625), (68, 5757), (70, 5769), (82, 5829), (88, 5853), (108, 5934), (114, 5970), (129, 6036), (130, 6045), (136, 6081), (160, 6225), (195, 6459), (200, 6489), (208, 6564), (214, 6588), (215, 6594), (223, 6633), (229, 6687), (234, 6726), (235, 6732), (242, 6762),

Gene: Kumotta_7 Start: 5906, Stop: 7153, Start Num: 30

Candidate Starts for Kumotta_7:

(Start: 30 @5906 has 148 MA's), (35, 5921), (47, 6011), (56, 6083), (138, 6416), (162, 6551), (226, 6992), (228, 7016), (238, 7085), (244, 7118),

Gene: Lahqtemish_6 Start: 5216, Stop: 6403, Start Num: 30

Candidate Starts for Lahqtemish_6:

(18, 5186), (Start: 30 @5216 has 148 MA's), (42, 5276), (56, 5393), (133, 5666), (138, 5693), (163, 5828), (191, 6035), (214, 6182), (217, 6194), (244, 6380),

Gene: Lakshmi_8 Start: 7510, Stop: 8760, Start Num: 30

Candidate Starts for Lakshmi_8:

(Start: 30 @7510 has 148 MA's), (162, 8164), (163, 8167), (187, 8335), (197, 8401), (199, 8407), (205, 8464), (212, 8509), (216, 8542), (223, 8578), (240, 8704), (243, 8728),

Gene: Lasagna_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for Lasagna_5:

(Start: 30 @4822 has 148 MA's), (59, 5017), (111, 5212), (115, 5230), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (175, 5554), (187, 5644), (198, 5713), (199, 5716), (212, 5818), (219, 5866),

Gene: Lennox_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for Lennox_5:

(Start: 30 @4822 has 148 MA's), (84, 5128), (111, 5212), (115, 5230), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (175, 5554), (187, 5644), (198, 5713), (199, 5716), (203, 5740), (212, 5818), (219, 5866),

Gene: Leona_6 Start: 5131, Stop: 6471, Start Num: 12

Candidate Starts for Leona_6:

(Start: 12 @5131 has 1 MA's), (Start: 15 @5143 has 5 MA's), (Start: 22 @5164 has 10 MA's), (49, 5296), (78, 5473), (82, 5500), (88, 5524), (108, 5605), (114, 5641), (129, 5707), (130, 5716), (136, 5752), (160, 5890), (196, 6127), (197, 6139), (208, 6229), (214, 6253), (215, 6259), (229, 6352), (238, 6415), (244, 6448),

Gene: LilStuart_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for LilStuart_5:

(Start: 30 @4822 has 148 MA's), (59, 5017), (111, 5212), (115, 5230), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (175, 5554), (187, 5644), (198, 5713), (199, 5716), (212, 5818), (219, 5866),

Gene: LimaBean_6 Start: 5142, Stop: 6323, Start Num: 30

Candidate Starts for LimaBean_6:

(18, 5112), (Start: 30 @5142 has 148 MA's), (42, 5202), (56, 5319), (79, 5403), (110, 5496), (133, 5586), (138, 5613), (163, 5748), (171, 5805), (191, 5955), (214, 6102), (217, 6114), (244, 6300),

Gene: Litotes_8 Start: 7465, Stop: 8715, Start Num: 30

Candidate Starts for Litotes_8:

(Start: 30 @7465 has 148 MA's), (56, 7642), (84, 7774), (111, 7858), (114, 7873), (162, 8119), (163, 8122), (165, 8140), (187, 8290), (199, 8362), (205, 8419), (212, 8464), (223, 8533), (224, 8542), (244, 8686), (248, 8707),

Gene: LittleTokyo_7 Start: 5442, Stop: 6755, Start Num: 23

Candidate Starts for LittleTokyo_7:

(14, 5418), (Start: 23 @5442 has 59 MA's), (49, 5574), (70, 5718), (82, 5778), (88, 5802), (108, 5883), (114, 5919), (136, 6030), (160, 6174), (196, 6411), (197, 6423), (214, 6537), (228, 6630), (229, 6636), (233, 6672), (244, 6732), (245, 6738),

Gene: Loviatar_12 Start: 5403, Stop: 6587, Start Num: 30

Candidate Starts for Loviatar_12:

(Start: 30 @5403 has 148 MA's), (42, 5463), (47, 5508), (56, 5580), (110, 5760), (133, 5850), (138, 5877), (163, 6012), (171, 6069), (172, 6072), (191, 6219), (217, 6378), (242, 6543), (244, 6564),

Gene: Lton_6 Start: 4345, Stop: 5667, Start Num: 21

Candidate Starts for Lton_6:

(Start: 21 @4345 has 9 MA's), (Start: 26 @4354 has 2 MA's), (45, 4438), (58, 4546), (71, 4627), (81, 4675), (82, 4678), (95, 4738), (101, 4759), (114, 4837), (124, 4879), (135, 4945), (136, 4948), (156, 5068), (160, 5092), (164, 5122), (181, 5239), (195, 5326), (198, 5344), (214, 5449), (215, 5455), (229, 5548), (234, 5587), (238, 5611),

Gene: Lucy_5 Start: 4813, Stop: 6060, Start Num: 30

Candidate Starts for Lucy_5:

(Start: 30 @4813 has 148 MA's), (111, 5203), (115, 5221), (153, 5410), (162, 5464), (163, 5467), (165, 5485), (175, 5545), (187, 5635), (198, 5704), (199, 5707), (203, 5731), (212, 5809), (219, 5857),

Gene: Lunar_8 Start: 5682, Stop: 6995, Start Num: 22

Candidate Starts for Lunar_8:

(Start: 15 @5661 has 5 MA's), (Start: 22 @5682 has 10 MA's), (49, 5814), (70, 5958), (78, 5991), (82, 6018), (114, 6159), (129, 6225), (130, 6234), (136, 6270), (160, 6414), (195, 6648), (197, 6663), (198, 6666), (208, 6753), (214, 6777), (223, 6822), (228, 6870), (229, 6876), (234, 6915), (235, 6921), (238, 6939),

Gene: Lynlen_6 Start: 5130, Stop: 6311, Start Num: 30

Candidate Starts for Lynlen_6:

(18, 5100), (Start: 30 @5130 has 148 MA's), (42, 5190), (56, 5307), (79, 5391), (110, 5484), (133, 5574), (138, 5601), (143, 5613), (163, 5736), (171, 5793), (191, 5943), (214, 6090), (217, 6102), (244, 6288),

Gene: Magsby_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Magsby_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Mahdia_5 Start: 4537, Stop: 5790, Start Num: 28

Candidate Starts for Mahdia_5:

(7, 4423), (Start: 28 @4537 has 8 MA's), (41, 4591), (45, 4621), (49, 4657), (80, 4837), (87, 4864), (129, 5008), (138, 5050), (143, 5062), (148, 5083), (154, 5134), (155, 5137), (161, 5173), (172, 5248), (186, 5350), (189, 5371), (190, 5383), (204, 5461), (212, 5533), (216, 5566), (228, 5653), (234, 5698),

Gene: Maja_6 Start: 5234, Stop: 6544, Start Num: 19

Candidate Starts for Maja_6:

(Start: 19 @5234 has 1 MA's), (Start: 23 @5240 has 59 MA's), (32, 5255), (49, 5369), (71, 5522), (78, 5546), (82, 5573), (88, 5597), (101, 5636), (103, 5651), (114, 5714), (124, 5756), (130, 5789), (131, 5792), (146, 5882), (160, 5969), (165, 6008), (194, 6194), (200, 6233), (201, 6239), (234, 6464),

Gene: Makoto_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for Makoto_5:

(Start: 30 @4822 has 148 MA's), (59, 5017), (84, 5128), (111, 5212), (115, 5230), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (175, 5554), (187, 5644), (199, 5716), (203, 5740), (212, 5818), (219, 5866),

Gene: MamaPearl_5 Start: 4813, Stop: 6063, Start Num: 30

Candidate Starts for MamaPearl_5:

(Start: 30 @4813 has 148 MA's), (153, 5413), (162, 5467), (163, 5470), (165, 5488), (187, 5638), (198, 5707), (199, 5710), (203, 5734), (212, 5812), (219, 5860),

Gene: MargaretKali_7 Start: 5320, Stop: 6636, Start Num: 23

Candidate Starts for MargaretKali_7:

(Start: 23 @5320 has 59 MA's), (32, 5335), (49, 5449), (82, 5653), (114, 5800), (124, 5842), (130, 5875), (136, 5911), (146, 5968), (147, 5971), (160, 6055), (199, 6310), (200, 6319), (203, 6334), (208, 6394), (223, 6463), (228, 6511), (234, 6556), (244, 6613),

Gene: Maria1952_5 Start: 4834, Stop: 6081, Start Num: 30

Candidate Starts for Maria1952_5:

(Start: 30 @4834 has 148 MA's), (50, 4960), (81, 5128), (110, 5215), (162, 5485), (163, 5488), (175, 5566), (187, 5656), (199, 5728), (205, 5785), (216, 5863), (223, 5899),

Gene: MeganNoll_8 Start: 7520, Stop: 8773, Start Num: 30

Candidate Starts for MeganNoll_8:

(Start: 30 @7520 has 148 MA's), (110, 7907), (111, 7916), (153, 8123), (162, 8177), (163, 8180), (165, 8198), (175, 8258), (187, 8348), (198, 8417), (199, 8420), (212, 8522), (219, 8570),

Gene: Melons_8 Start: 5661, Stop: 6995, Start Num: 15

Candidate Starts for Melons_8:

(Start: 15 @5661 has 5 MA's), (Start: 22 @5682 has 10 MA's), (49, 5814), (70, 5958), (78, 5991), (82, 6018), (114, 6159), (129, 6225), (130, 6234), (136, 6270), (160, 6414), (195, 6648), (197, 6663), (198, 6666), (208, 6753), (214, 6777), (223, 6822), (228, 6870), (229, 6876), (234, 6915), (235, 6921), (238, 6939),

Gene: Melville_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Melville_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: MichelleMyBell_6 Start: 4383, Stop: 5675, Start Num: 23

Candidate Starts for MichelleMyBell_6:

(Start: 23 @4383 has 59 MA's), (Start: 28 @4395 has 8 MA's), (45, 4479), (49, 4515), (55, 4572), (61, 4611), (71, 4644), (77, 4665), (81, 4692), (82, 4695), (110, 4806), (114, 4836), (123, 4872), (130, 4911), (136, 4947), (139, 4971), (146, 5010), (154, 5064), (160, 5097), (164, 5127), (194, 5322), (195, 5331), (198, 5349), (214, 5454), (215, 5460), (228, 5547), (229, 5553), (247, 5661),

Gene: Misaeng_8 Start: 7547, Stop: 8797, Start Num: 30

Candidate Starts for Misaeng_8:

(Start: 30 @7547 has 148 MA's), (162, 8201), (163, 8204), (187, 8372), (197, 8438), (199, 8444), (205, 8501), (211, 8543), (212, 8546), (216, 8579), (223, 8615), (240, 8741), (243, 8765),

Gene: Moki_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for Moki_5:

(Start: 30 @4822 has 148 MA's), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (187, 5644), (198, 5713), (199, 5716), (203, 5740), (212, 5818), (219, 5866), (223, 5887),

Gene: Moosehead_6 Start: 4338, Stop: 5645, Start Num: 21

Candidate Starts for Moosehead_6:

(Start: 21 @4338 has 9 MA's), (45, 4434), (49, 4470), (58, 4542), (71, 4623), (82, 4674), (95, 4716), (99, 4731), (114, 4815), (123, 4851), (124, 4857), (135, 4923), (136, 4926), (160, 5070), (181, 5217), (195, 5304), (202, 5346), (215, 5433), (229, 5526), (233, 5562),

Gene: Morrissey_5 Start: 4548, Stop: 5792, Start Num: 28

Candidate Starts for Morrissey_5:

(Start: 28 @4548 has 8 MA's), (37, 4575), (41, 4599), (80, 4845), (138, 5058), (143, 5070), (148, 5091), (155, 5145), (168, 5238), (172, 5256), (183, 5331), (189, 5379), (190, 5391), (192, 5400), (216, 5574), (226, 5637), (228, 5661), (234, 5706), (238, 5730), (240, 5736), (242, 5742),

Gene: MrGloopy_8 Start: 7453, Stop: 8706, Start Num: 30

Candidate Starts for MrGloopy_8:

(Start: 30 @7453 has 148 MA's), (110, 7840), (111, 7849), (153, 8056), (162, 8110), (163, 8113), (165, 8131), (175, 8191), (187, 8281), (198, 8350), (199, 8353), (212, 8455), (219, 8503),

Gene: Nancia_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for Nancia_5:

(Start: 30 @4822 has 148 MA's), (59, 5017), (111, 5212), (115, 5230), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (175, 5554), (187, 5644), (198, 5713), (199, 5716), (212, 5818), (219, 5866),

Gene: Nenae_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for Nenae_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: Nicky22_7 Start: 5602, Stop: 6783, Start Num: 30

Candidate Starts for Nicky22_7:

(Start: 30 @5602 has 148 MA's), (42, 5662), (56, 5779), (79, 5863), (110, 5956), (133, 6046), (138, 6073), (143, 6085), (163, 6208), (171, 6265), (191, 6415), (214, 6562), (217, 6574), (244, 6760),

Gene: Nubia_8 Start: 7470, Stop: 8720, Start Num: 30

Candidate Starts for Nubia_8:

(Start: 30 @7470 has 148 MA's), (94, 7800), (162, 8124), (163, 8127), (187, 8295), (197, 8361), (199, 8367), (205, 8424), (212, 8469), (216, 8502), (223, 8538), (240, 8664), (243, 8688),

Gene: OMalley_5 Start: 4834, Stop: 6081, Start Num: 29

Candidate Starts for OMalley_5:

(Start: 29 @4834 has 6 MA's), (50, 4960), (111, 5224), (162, 5485), (163, 5488), (187, 5656), (192, 5689), (198, 5725), (199, 5728), (205, 5785),

Gene: Olliecat_6 Start: 5418, Stop: 6635, Start Num: 30

Candidate Starts for Olliecat_6:

(Start: 30 @5418 has 148 MA's), (56, 5595), (57, 5604), (107, 5781), (117, 5823), (133, 5895), (143, 5934), (148, 5955), (163, 6057), (166, 6078), (209, 6390), (216, 6423),

Gene: OneDirection_6 Start: 4333, Stop: 5640, Start Num: 21

Candidate Starts for OneDirection_6:

(Start: 21 @4333 has 9 MA's), (45, 4429), (49, 4465), (51, 4483), (58, 4537), (71, 4618), (82, 4669), (95, 4711), (99, 4726), (114, 4810), (123, 4846), (135, 4918), (136, 4921), (145, 4975), (146, 4978), (160, 5065), (195, 5299), (198, 5317), (202, 5341), (215, 5428), (229, 5521), (233, 5557),

Gene: Orcanus_7 Start: 5504, Stop: 6808, Start Num: 23

Candidate Starts for Orcanus_7:

(Start: 23 @5504 has 59 MA's), (49, 5636), (58, 5708), (82, 5840), (88, 5861), (108, 5942), (114, 5978), (129, 6044), (131, 6056), (148, 6149), (160, 6227), (196, 6464), (208, 6566), (214, 6590), (219, 6614), (228, 6683), (229, 6689), (233, 6725), (238, 6752),

Gene: OurGirlNessie_5 Start: 4813, Stop: 6060, Start Num: 30

Candidate Starts for OurGirlNessie_5:

(Start: 30 @4813 has 148 MA's), (59, 5008), (84, 5119), (111, 5203), (115, 5221), (153, 5410), (162, 5464), (163, 5467), (165, 5485), (175, 5545), (187, 5635), (198, 5704), (199, 5707), (212, 5809), (219, 5857),

Gene: Oxynfrius_8 Start: 7483, Stop: 8733, Start Num: 30

Candidate Starts for Oxynfrius_8:

(Start: 30 @7483 has 148 MA's), (162, 8137), (163, 8140), (187, 8308), (197, 8374), (199, 8380), (205, 8437), (212, 8482), (216, 8515), (223, 8551), (240, 8677), (243, 8701),

Gene: PFR1_05 Start: 4989, Stop: 6275, Start Num: 30

Candidate Starts for PFR1_05:

(Start: 30 @4989 has 148 MA's), (34, 4998), (43, 5049), (48, 5100), (67, 5217), (73, 5250), (90, 5313), (96, 5328), (98, 5337), (100, 5343), (105, 5373), (117, 5430), (151, 5586), (154, 5607), (157, 5619), (158, 5622), (162, 5658), (167, 5691), (168, 5703), (169, 5706), (177, 5769), (184, 5802), (185, 5814), (189, 5850), (190, 5862), (198, 5907), (199, 5910), (213, 6027), (215, 6042), (217, 6048), (223, 6081), (226, 6108), (229, 6138), (233, 6174), (237, 6195),

Gene: PFR2_05 Start: 4989, Stop: 6275, Start Num: 30

Candidate Starts for PFR2_05:

(Start: 30 @4989 has 148 MA's), (34, 4998), (43, 5049), (48, 5100), (67, 5217), (73, 5250), (90, 5313), (96, 5328), (98, 5337), (100, 5343), (105, 5373), (117, 5430), (151, 5586), (154, 5607), (157, 5619), (158, 5622), (162, 5658), (167, 5691), (168, 5703), (169, 5706), (177, 5769), (184, 5802), (185, 5814), (189, 5850), (190, 5862), (198, 5907), (199, 5910), (213, 6027), (215, 6042), (217, 6048), (223, 6081), (226, 6108), (229, 6138), (233, 6174), (237, 6195),

Gene: Panchino_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for Panchino_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: Parmesanjohn_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Parmesanjohn_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: PartyCup_8 Start: 7512, Stop: 8762, Start Num: 30

Candidate Starts for PartyCup_8:

(Start: 30 @7512 has 148 MA's), (56, 7689), (84, 7821), (111, 7905), (114, 7920), (162, 8166), (163, 8169), (165, 8187), (187, 8337), (199, 8409), (205, 8466), (212, 8511), (223, 8580), (224, 8589), (244, 8733),

Gene: Pepperoni_6 Start: 4639, Stop: 5961, Start Num: 21

Candidate Starts for Pepperoni_6:

(Start: 21 @4639 has 9 MA's), (Start: 26 @4648 has 2 MA's), (45, 4732), (58, 4840), (71, 4921), (81, 4969), (82, 4972), (95, 5032), (101, 5053), (114, 5131), (124, 5173), (135, 5239), (136, 5242), (156, 5362), (160, 5386), (164, 5416), (181, 5533), (195, 5620), (198, 5638), (214, 5743), (215, 5749), (229, 5842), (234, 5881), (238, 5905),

Gene: PhancyPhin_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for PhancyPhin_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: Philonius_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Philonius_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Phisb_6 Start: 5130, Stop: 6311, Start Num: 30

Candidate Starts for Phisb_6:

(Start: 30 @5130 has 148 MA's), (42, 5190), (56, 5307), (79, 5391), (110, 5484), (133, 5574), (138, 5601), (143, 5613), (163, 5736), (171, 5793), (191, 5943), (214, 6090), (217, 6102), (244, 6288),

Gene: Phloss_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Phloss_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: PhluffyCoco_6 Start: 5085, Stop: 6428, Start Num: 13

Candidate Starts for PhluffyCoco_6:

(9, 5067), (13, 5085), (14, 5094), (Start: 22 @5115 has 10 MA's), (49, 5247), (78, 5424), (82, 5451), (88, 5475), (114, 5592), (129, 5658), (130, 5667), (141, 5742), (160, 5847), (196, 6084), (197, 6096), (200, 6111), (208, 6186), (214, 6210), (215, 6216), (223, 6255), (228, 6303), (229, 6309), (238, 6372), (244, 6405),

Gene: Phrann_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for Phrann_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198,

5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: PinkFriday_5 Start: 4834, Stop: 6081, Start Num: 30

Candidate Starts for PinkFriday_5:

(Start: 30 @4834 has 148 MA's), (50, 4960), (81, 5128), (110, 5215), (162, 5485), (163, 5488), (175, 5566), (187, 5656), (199, 5728), (205, 5785), (223, 5899),

Gene: Pipsqueaks_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Pipsqueaks_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: PitaDog_5 Start: 4813, Stop: 6060, Start Num: 30

Candidate Starts for PitaDog_5:

(Start: 30 @4813 has 148 MA's), (59, 5008), (111, 5203), (115, 5221), (153, 5410), (162, 5464), (163, 5467), (165, 5485), (175, 5545), (187, 5635), (198, 5704), (199, 5707), (212, 5809), (219, 5857),

Gene: Polka_7 Start: 5521, Stop: 6834, Start Num: 22

Candidate Starts for Polka_7:

(Start: 15 @5500 has 5 MA's), (Start: 22 @5521 has 10 MA's), (49, 5653), (70, 5797), (78, 5830), (82, 5857), (114, 5998), (129, 6064), (130, 6073), (136, 6109), (160, 6253), (195, 6487), (197, 6502), (198, 6505), (208, 6592), (214, 6616), (223, 6661), (228, 6709), (229, 6715), (234, 6754), (235, 6760), (238, 6778),

Gene: Potatoes_8 Start: 7514, Stop: 8767, Start Num: 30

Candidate Starts for Potatoes_8:

(Start: 30 @7514 has 148 MA's), (110, 7901), (111, 7910), (153, 8117), (162, 8171), (163, 8174), (165, 8192), (175, 8252), (187, 8342), (198, 8411), (199, 8414), (212, 8516), (219, 8564),

Gene: Preamble_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for Preamble_5:

(Start: 30 @4822 has 148 MA's), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (187, 5644), (198, 5713), (199, 5716), (210, 5812), (212, 5818), (219, 5866),

Gene: Pterodactyl_5 Start: 4813, Stop: 6060, Start Num: 30

Candidate Starts for Pterodactyl_5:

(Start: 30 @4813 has 148 MA's), (111, 5203), (115, 5221), (153, 5410), (162, 5464), (163, 5467), (165, 5485), (175, 5545), (187, 5635), (198, 5704), (199, 5707), (212, 5809), (214, 5833), (219, 5857),

Gene: Pumancara_5 Start: 4834, Stop: 6081, Start Num: 30

Candidate Starts for Pumancara_5:

(Start: 30 @4834 has 148 MA's), (50, 4960), (81, 5128), (110, 5215), (162, 5485), (163, 5488), (175, 5566), (187, 5656), (199, 5728), (205, 5785), (223, 5899),

Gene: Puppies_5 Start: 4440, Stop: 5696, Start Num: 26

Candidate Starts for Puppies_5:

(Start: 26 @4440 has 2 MA's), (41, 4497), (45, 4527), (54, 4620), (80, 4743), (87, 4770), (138, 4965), (174, 5175), (190, 5298), (200, 5355), (211, 5445), (228, 5568), (234, 5613),

Gene: Purgamenstris_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for Purgamenstris_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: QMacho_7 Start: 5610, Stop: 6791, Start Num: 30

Candidate Starts for QMacho_7:

(Start: 30 @5610 has 148 MA's), (42, 5670), (56, 5787), (79, 5871), (110, 5964), (133, 6054), (138, 6081), (143, 6093), (163, 6216), (171, 6273), (191, 6423), (214, 6570), (217, 6582), (244, 6768),

Gene: Quenya_7 Start: 5311, Stop: 6507, Start Num: 30

Candidate Starts for Quenya_7:

(Start: 30 @5311 has 148 MA's), (56, 5488), (79, 5581), (110, 5674), (133, 5764), (138, 5791), (143, 5803), (164, 5935), (166, 5947), (172, 5986), (191, 6133), (217, 6292), (242, 6457),

Gene: RAP15_8 Start: 7520, Stop: 8773, Start Num: 30

Candidate Starts for RAP15_8:

(Start: 30 @7520 has 148 MA's), (110, 7907), (111, 7916), (153, 8123), (162, 8177), (163, 8180), (165, 8198), (175, 8258), (187, 8348), (198, 8417), (199, 8420), (212, 8522), (219, 8570),

Gene: Raymond7_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for Raymond7_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: RcigaStruga_8 Start: 7482, Stop: 8732, Start Num: 30

Candidate Starts for RcigaStruga_8:

(Start: 30 @7482 has 148 MA's), (125, 7938), (162, 8136), (163, 8139), (187, 8307), (197, 8373), (199, 8379), (205, 8436), (211, 8478), (212, 8481), (216, 8514), (223, 8550), (240, 8676), (243, 8700),

Gene: Rebel_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for Rebel_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: RedFox_6 Start: 5115, Stop: 6428, Start Num: 22

Candidate Starts for RedFox_6:

(9, 5067), (13, 5085), (14, 5094), (Start: 22 @5115 has 10 MA's), (49, 5247), (78, 5424), (82, 5451), (88, 5475), (114, 5592), (129, 5658), (130, 5667), (141, 5742), (160, 5847), (196, 6084), (197, 6096), (200, 6111), (208, 6186), (214, 6210), (215, 6216), (223, 6255), (228, 6303), (229, 6309), (238, 6372), (244, 6405),

Gene: Redi_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for Redi_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130,

4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: Renna12_7 Start: 5310, Stop: 6623, Start Num: 22

Candidate Starts for Renna12_7:

(Start: 12 @5277 has 1 MA's), (Start: 15 @5289 has 5 MA's), (Start: 22 @5310 has 10 MA's), (Start: 30 @5325 has 148 MA's), (49, 5442), (78, 5619), (82, 5646), (88, 5670), (114, 5787), (129, 5853), (130, 5862), (160, 6042), (197, 6291), (208, 6381), (214, 6405), (215, 6411), (228, 6498), (229, 6504), (238, 6567), (244, 6600),

Gene: Reyja_7 Start: 4610, Stop: 5923, Start Num: 21

Candidate Starts for Reyja_7:

(Start: 21 @4610 has 9 MA's), (36, 4649), (45, 4712), (49, 4748), (75, 4913), (114, 5093), (124, 5135), (131, 5171), (160, 5348), (165, 5387), (180, 5489), (188, 5537), (199, 5603), (201, 5618), (208, 5681), (228, 5798), (231, 5819), (242, 5879),

Gene: Riovina_5 Start: 4834, Stop: 6081, Start Num: 29

Candidate Starts for Riovina_5:

(Start: 29 @4834 has 6 MA's), (50, 4960), (111, 5224), (162, 5485), (163, 5488), (187, 5656), (192, 5689), (198, 5725), (199, 5728), (205, 5785),

Gene: Riverdale_8 Start: 7451, Stop: 8704, Start Num: 30

Candidate Starts for Riverdale_8:

(Start: 30 @7451 has 148 MA's), (110, 7838), (111, 7847), (153, 8054), (162, 8108), (163, 8111), (165, 8129), (175, 8189), (187, 8279), (198, 8348), (199, 8351), (212, 8453), (219, 8501),

Gene: Rollins_5 Start: 5060, Stop: 6250, Start Num: 30

Candidate Starts for Rollins_5:

(Start: 30 @5060 has 148 MA's), (42, 5120), (56, 5237), (121, 5459), (133, 5516), (134, 5522), (138, 5543), (140, 5552), (173, 5741), (217, 6035), (223, 6068), (242, 6200), (244, 6221), (249, 6245),

Gene: Rona_6 Start: 5395, Stop: 6588, Start Num: 30

Candidate Starts for Rona_6:

(Start: 30 @5395 has 148 MA's), (42, 5455), (133, 5851), (138, 5878), (151, 5938), (163, 6013), (164, 6022), (171, 6070), (172, 6073), (191, 6220), (217, 6379), (242, 6544), (244, 6565),

Gene: RootBeer_6 Start: 4509, Stop: 5753, Start Num: 31

Candidate Starts for RootBeer_6:

(Start: 31 @4509 has 2 MA's), (160, 5175), (165, 5214), (183, 5331), (187, 5358), (220, 5562),

Gene: Rozby_8 Start: 7451, Stop: 8704, Start Num: 30

Candidate Starts for Rozby_8:

(Start: 30 @7451 has 148 MA's), (110, 7838), (111, 7847), (153, 8054), (162, 8108), (163, 8111), (165, 8129), (175, 8189), (187, 8279), (198, 8348), (199, 8351), (212, 8453), (219, 8501),

Gene: Rubeelu_6 Start: 4369, Stop: 5661, Start Num: 23

Candidate Starts for Rubeelu_6:

(Start: 23 @4369 has 59 MA's), (Start: 28 @4381 has 8 MA's), (45, 4465), (49, 4501), (55, 4558), (61, 4597), (71, 4630), (77, 4651), (81, 4678), (82, 4681), (110, 4792), (114, 4822), (119, 4840), (123, 4858), (129, 4888), (130, 4897), (136, 4933), (139, 4957), (146, 4996), (154, 5050), (160, 5083), (164, 5113), (194, 5308), (195, 5317), (198, 5335), (214, 5440), (215, 5446), (228, 5533), (229, 5539), (247, 5647),

Gene: Ruchi_7 Start: 5750, Stop: 7054, Start Num: 23

Candidate Starts for Ruchi_7:

(Start: 23 @5750 has 59 MA's), (49, 5882), (63, 5987), (82, 6086), (88, 6110), (114, 6227), (129, 6293), (131, 6305), (136, 6338), (160, 6476), (176, 6578), (194, 6701), (195, 6710), (208, 6815), (219, 6863), (229, 6938), (233, 6974), (238, 7001),

Gene: SanaSana_7 Start: 5403, Stop: 6587, Start Num: 30

Candidate Starts for SanaSana_7:

(Start: 30 @5403 has 148 MA's), (42, 5463), (47, 5508), (56, 5580), (110, 5760), (133, 5850), (138, 5877), (163, 6012), (171, 6069), (172, 6072), (191, 6219), (217, 6378), (242, 6543), (244, 6564),

Gene: SansAfet_6 Start: 5130, Stop: 6311, Start Num: 30

Candidate Starts for SansAfet_6:

(Start: 30 @5130 has 148 MA's), (42, 5190), (56, 5307), (79, 5391), (110, 5484), (133, 5574), (138, 5601), (143, 5613), (163, 5736), (171, 5793), (191, 5943), (214, 6090), (217, 6102), (244, 6288),

Gene: Santhid_6 Start: 4492, Stop: 5805, Start Num: 21

Candidate Starts for Santhid_6:

(2, 4003), (3, 4054), (4, 4201), (5, 4375), (Start: 21 @4492 has 9 MA's), (36, 4531), (45, 4594), (49, 4630), (75, 4795), (114, 4975), (124, 5017), (131, 5053), (160, 5230), (165, 5269), (180, 5371), (188, 5419), (201, 5500), (208, 5563), (228, 5680), (242, 5761),

Gene: Sapo_4 Start: 3892, Stop: 5178, Start Num: 28

Candidate Starts for Sapo_4:

(Start: 28 @3892 has 8 MA's), (106, 4273), (109, 4285), (120, 4339), (121, 4342), (147, 4465), (148, 4468), (183, 4708), (189, 4753), (198, 4810), (217, 4954),

Gene: SarBear_6 Start: 5127, Stop: 6308, Start Num: 30

Candidate Starts for SarBear_6:

(Start: 30 @5127 has 148 MA's), (42, 5187), (56, 5304), (79, 5388), (110, 5481), (133, 5571), (138, 5598), (143, 5610), (163, 5733), (171, 5790), (191, 5940), (214, 6087), (217, 6099), (244, 6285),

Gene: Sarge_6 Start: 4818, Stop: 6134, Start Num: 23

Candidate Starts for Sarge_6:

(16, 4797), (Start: 23 @4818 has 59 MA's), (32, 4833), (49, 4947), (71, 5100), (78, 5124), (82, 5151), (114, 5298), (122, 5331), (124, 5340), (131, 5376), (146, 5466), (160, 5553), (194, 5778), (201, 5823), (214, 5916), (222, 5958), (223, 5961), (234, 6054),

Gene: Savage2526_8 Start: 7514, Stop: 8767, Start Num: 30

Candidate Starts for Savage2526_8:

(Start: 30 @7514 has 148 MA's), (110, 7901), (111, 7910), (153, 8117), (162, 8171), (163, 8174), (165, 8192), (175, 8252), (187, 8342), (198, 8411), (199, 8414), (212, 8516), (219, 8564),

Gene: Schmidt_8 Start: 5736, Stop: 7001, Start Num: 30

Candidate Starts for Schmidt_8:

(Start: 30 @5736 has 148 MA's), (38, 5766), (41, 5787), (44, 5808), (49, 5847), (64, 5943), (79, 6000), (93, 6051), (107, 6096), (116, 6138), (118, 6144), (126, 6183), (133, 6213), (151, 6300), (172, 6438), (190, 6570), (205, 6675), (212, 6720), (218, 6765), (223, 6789), (226, 6816), (227, 6834), (234, 6885), (242, 6921), (250, 6972),

Gene: Schnauzer_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Schnauzer_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Scitech_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Scitech_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Scuttle_8 Start: 7520, Stop: 8773, Start Num: 30

Candidate Starts for Scuttle_8:

(Start: 30 @7520 has 148 MA's), (110, 7907), (111, 7916), (153, 8123), (162, 8177), (163, 8180), (165, 8198), (175, 8258), (187, 8348), (198, 8417), (199, 8420), (212, 8522), (219, 8570), (248, 8765),

Gene: Sergei_5 Start: 4834, Stop: 6081, Start Num: 30

Candidate Starts for Sergei_5:

(Start: 30 @4834 has 148 MA's), (50, 4960), (81, 5128), (110, 5215), (162, 5485), (163, 5488), (175, 5566), (187, 5656), (199, 5728), (205, 5785), (216, 5863), (223, 5899),

Gene: Shambre1_7 Start: 6059, Stop: 7345, Start Num: 31

Candidate Starts for Shambre1_7:

(Start: 31 @6059 has 2 MA's), (89, 6398), (150, 6701), (160, 6767), (161, 6773), (228, 7217), (239, 7289),

Gene: Sharkboy_6 Start: 5394, Stop: 6587, Start Num: 30

Candidate Starts for Sharkboy_6:

(Start: 30 @5394 has 148 MA's), (42, 5454), (133, 5850), (138, 5877), (151, 5937), (163, 6012), (164, 6021), (171, 6069), (172, 6072), (191, 6219), (217, 6378), (242, 6543), (244, 6564),

Gene: Shayna_5 Start: 5149, Stop: 6357, Start Num: 30

Candidate Starts for Shayna_5:

(Start: 30 @5149 has 148 MA's), (50, 5275), (121, 5560), (133, 5617), (138, 5644), (157, 5737), (163, 5779), (169, 5824), (234, 6277),

Gene: Shoya_5 Start: 4578, Stop: 5801, Start Num: 30

Candidate Starts for Shoya_5:

(Start: 30 @4578 has 148 MA's), (47, 4683), (56, 4755), (80, 4854), (110, 4938), (121, 4986), (162, 5202), (166, 5226), (192, 5412), (198, 5448), (216, 5586), (222, 5619),

Gene: ShrimpFriedEgg_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for ShrimpFriedEgg_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: Shweta_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for Shweta_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: Silvafighter_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Silvafighter_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Silvy_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Silvy_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: SkinnyPete_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for SkinnyPete_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: Skylord_5 Start: 5000, Stop: 6190, Start Num: 30

Candidate Starts for Skylord_5:

(Start: 30 @5000 has 148 MA's), (42, 5060), (56, 5177), (121, 5399), (133, 5456), (134, 5462), (138, 5483), (140, 5492), (173, 5681), (217, 5975), (223, 6008), (242, 6140), (244, 6161), (249, 6185),

Gene: Slay_6 Start: 5604, Stop: 6785, Start Num: 30

Candidate Starts for Slay_6:

(Start: 30 @5604 has 148 MA's), (42, 5664), (56, 5781), (79, 5865), (110, 5958), (133, 6048), (138, 6075), (143, 6087), (163, 6210), (171, 6267), (191, 6417), (214, 6564), (217, 6576), (244, 6762),

Gene: Smurph_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Smurph_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Snekmaggedon_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for Snekmaggedon_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: Splinter_10 Start: 7211, Stop: 8500, Start Num: 17

Candidate Starts for Splinter_10:

(Start: 11 @7193 has 4 MA's), (Start: 17 @7211 has 2 MA's), (Start: 30 @7244 has 148 MA's), (33, 7250), (57, 7424), (62, 7445), (64, 7451), (79, 7514), (92, 7559), (133, 7730), (147, 7787), (164, 7904), (166, 7916), (168, 7937), (172, 7955), (183, 8030), (197, 8132), (199, 8138), (207, 8213), (211, 8237), (216, 8273), (222, 8306), (226, 8336), (227, 8354), (230, 8372), (234, 8405), (236, 8417),

Gene: SpongeBob_6 Start: 4389, Stop: 5684, Start Num: 23

Candidate Starts for SpongeBob_6:

(Start: 23 @4389 has 59 MA's), (Start: 28 @4401 has 8 MA's), (45, 4485), (49, 4521), (55, 4578), (61, 4617), (71, 4650), (77, 4671), (81, 4698), (110, 4812), (112, 4836), (114, 4842), (123, 4878), (130, 4917), (136, 4953), (146, 5016), (154, 5070), (160, 5103), (168, 5166), (183, 5259), (194, 5328), (195, 5337), (198, 5355), (213, 5451), (214, 5460), (215, 5466), (216, 5469), (225, 5526), (228, 5553), (229, 5559),

Gene: Squircle_6 Start: 5417, Stop: 6634, Start Num: 30

Candidate Starts for Squircle_6:

(Start: 30 @5417 has 148 MA's), (56, 5594), (57, 5603), (107, 5780), (117, 5822), (133, 5894), (143, 5933), (148, 5954), (163, 6056), (166, 6077), (209, 6389), (216, 6422),

Gene: Stoor_6 Start: 5400, Stop: 6584, Start Num: 30

Candidate Starts for Stoor_6:

(Start: 30 @5400 has 148 MA's), (42, 5460), (47, 5505), (56, 5577), (110, 5757), (133, 5847), (138, 5874), (163, 6009), (171, 6066), (172, 6069), (191, 6216), (217, 6375), (242, 6540), (244, 6561),

Gene: Stromboli_6 Start: 5400, Stop: 6584, Start Num: 30

Candidate Starts for Stromboli_6:

(Start: 30 @5400 has 148 MA's), (42, 5460), (47, 5505), (56, 5577), (110, 5757), (133, 5847), (138, 5874), (163, 6009), (171, 6066), (172, 6069), (191, 6216), (217, 6375), (244, 6561),

Gene: SunnyD_5 Start: 5149, Stop: 6357, Start Num: 30

Candidate Starts for SunnyD_5:

(Start: 30 @5149 has 148 MA's), (50, 5275), (121, 5560), (133, 5617), (138, 5644), (157, 5737), (163, 5779), (169, 5824), (234, 6277),

Gene: Supakev_5 Start: 4834, Stop: 6081, Start Num: 30

Candidate Starts for Supakev_5:

(Start: 30 @4834 has 148 MA's), (50, 4960), (81, 5128), (110, 5215), (162, 5485), (163, 5488), (175, 5566), (187, 5656), (199, 5728), (205, 5785), (223, 5899),

Gene: Suppi_8 Start: 7512, Stop: 8762, Start Num: 30

Candidate Starts for Suppi_8:

(Start: 30 @7512 has 148 MA's), (56, 7689), (84, 7821), (111, 7905), (114, 7920), (162, 8166), (163, 8169), (165, 8187), (187, 8337), (199, 8409), (203, 8433), (205, 8466), (212, 8511), (223, 8580), (224, 8589), (244, 8733),

Gene: Swervy_6 Start: 5127, Stop: 6308, Start Num: 30

Candidate Starts for Swervy_6:

(Start: 30 @5127 has 148 MA's), (42, 5187), (56, 5304), (79, 5388), (110, 5481), (133, 5571), (138, 5598), (143, 5610), (163, 5733), (171, 5790), (191, 5940), (214, 6087), (217, 6099), (244, 6285),

Gene: TZGordon_12 Start: 7336, Stop: 8643, Start Num: 11

Candidate Starts for TZGordon_12:

(Start: 11 @7336 has 4 MA's), (Start: 17 @7354 has 2 MA's), (Start: 30 @7387 has 148 MA's), (33, 7393), (57, 7567), (62, 7588), (64, 7594), (79, 7657), (92, 7702), (127, 7846), (133, 7873), (147, 7930), (164, 8047), (166, 8059), (168, 8080), (183, 8173), (197, 8275), (199, 8281), (207, 8356), (222, 8449), (226, 8479), (227, 8497), (230, 8515), (234, 8548), (236, 8560),

Gene: Tapioca_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Tapioca_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Tarzan_6 Start: 4496, Stop: 5809, Start Num: 21

Candidate Starts for Tarzan_6:

(Start: 21 @4496 has 9 MA's), (36, 4535), (45, 4598), (49, 4634), (75, 4799), (114, 4979), (124, 5021), (128, 5042), (131, 5057), (145, 5144), (160, 5234), (165, 5273), (180, 5375), (188, 5423), (201, 5504), (208, 5567), (228, 5684), (242, 5765),

Gene: TattModd_8 Start: 7514, Stop: 8767, Start Num: 30

Candidate Starts for TattModd_8:

(Start: 30 @7514 has 148 MA's), (110, 7901), (111, 7910), (153, 8117), (162, 8171), (163, 8174), (165, 8192), (175, 8252), (187, 8342), (198, 8411), (199, 8414), (212, 8516), (219, 8564),

Gene: TaylorSipt_7 Start: 5516, Stop: 6829, Start Num: 23

Candidate Starts for TaylorSipt_7:

(Start: 23 @5516 has 59 MA's), (49, 5648), (68, 5780), (82, 5852), (108, 5957), (114, 5993), (123, 6029), (129, 6059), (131, 6071), (160, 6248), (194, 6473), (196, 6485), (208, 6587), (214, 6611), (228, 6704), (229, 6710), (233, 6746), (234, 6749), (235, 6755), (238, 6773), (245, 6812),

Gene: Teagster_5 Start: 5152, Stop: 6360, Start Num: 29

Candidate Starts for Teagster_5:

(Start: 29 @5152 has 6 MA's), (50, 5278), (121, 5563), (133, 5620), (138, 5647), (157, 5740), (163, 5782), (169, 5827), (234, 6280),

Gene: Temper16_5 Start: 4834, Stop: 6081, Start Num: 30

Candidate Starts for Temper16_5:

(Start: 30 @4834 has 148 MA's), (50, 4960), (81, 5128), (110, 5215), (162, 5485), (163, 5488), (175, 5566), (187, 5656), (199, 5728), (205, 5785), (216, 5863), (223, 5899),

Gene: TinaLin_13 Start: 8010, Stop: 9260, Start Num: 30

Candidate Starts for TinaLin_13:

(Start: 30 @8010 has 148 MA's), (41, 8061), (57, 8190), (64, 8217), (79, 8277), (92, 8322), (109, 8379), (110, 8382), (129, 8478), (152, 8586), (157, 8616), (164, 8667), (166, 8679), (172, 8718), (176, 8739), (182, 8787), (190, 8850), (196, 8880), (217, 9036), (223, 9069), (225, 9090), (232, 9153), (234, 9165), (236, 9177),

Gene: Trine_5 Start: 4486, Stop: 5751, Start Num: 28

Candidate Starts for Trine_5:

(Start: 28 @4486 has 8 MA's), (49, 4606), (52, 4636), (59, 4693), (69, 4750), (80, 4789), (83, 4807), (138, 5005), (143, 5017), (147, 5035), (148, 5038), (157, 5101), (161, 5128), (169, 5188), (172, 5203), (184, 5284), (189, 5326), (190, 5338), (212, 5488), (226, 5584), (234, 5653),

Gene: TukTuk_6 Start: 5127, Stop: 6308, Start Num: 30

Candidate Starts for TukTuk_6:

(Start: 30 @5127 has 148 MA's), (42, 5187), (56, 5304), (79, 5388), (110, 5481), (133, 5571), (138, 5598), (143, 5610), (163, 5733), (171, 5790), (191, 5940), (214, 6087), (217, 6099), (244, 6285),

Gene: Upyo_5 Start: 4487, Stop: 5743, Start Num: 28

Candidate Starts for Upyo_5:

(Start: 28 @4487 has 8 MA's), (Start: 30 @4490 has 148 MA's), (38, 4520), (72, 4760), (80, 4790), (143, 5021), (161, 5132), (169, 5192), (172, 5207), (189, 5330), (190, 5342), (211, 5489), (212, 5492), (216, 5525), (218, 5537), (226, 5588), (234, 5657), (238, 5681), (240, 5687), (242, 5693),

Gene: Urla_5 Start: 4817, Stop: 6067, Start Num: 30

Candidate Starts for Urla_5:

(Start: 30 @4817 has 148 MA's), (153, 5417), (162, 5471), (163, 5474), (165, 5492), (187, 5642), (198, 5711), (199, 5714), (203, 5738), (212, 5816), (219, 5864),

Gene: Vallejo_8 Start: 7451, Stop: 8704, Start Num: 30

Candidate Starts for Vallejo_8:

(Start: 30 @7451 has 148 MA's), (110, 7838), (111, 7847), (153, 8054), (162, 8108), (163, 8111), (165, 8129), (175, 8189), (187, 8279), (198, 8348), (199, 8351), (212, 8453), (219, 8501),

Gene: Vendetta_10 Start: 7211, Stop: 8500, Start Num: 17

Candidate Starts for Vendetta_10:

(Start: 11 @7193 has 4 MA's), (Start: 17 @7211 has 2 MA's), (Start: 30 @7244 has 148 MA's), (33, 7250), (57, 7424), (62, 7445), (64, 7451), (79, 7514), (92, 7559), (133, 7730), (147, 7787), (164, 7904), (166, 7916), (168, 7937), (172, 7955), (183, 8030), (197, 8132), (199, 8138), (207, 8213), (211, 8237), (216, 8273), (222, 8306), (226, 8336), (227, 8354), (230, 8372), (234, 8405), (236, 8417),

Gene: Vitas_5 Start: 5000, Stop: 6190, Start Num: 30

Candidate Starts for Vitas_5:

(Start: 30 @5000 has 148 MA's), (42, 5060), (56, 5177), (121, 5399), (133, 5456), (134, 5462), (138, 5483), (140, 5492), (173, 5681), (217, 5975), (223, 6008), (242, 6140), (244, 6161), (249, 6185),

Gene: Vulpecula_7 Start: 5831, Stop: 7132, Start Num: 23

Candidate Starts for Vulpecula_7:

(6, 5726), (10, 5792), (16, 5810), (Start: 23 @5831 has 59 MA's), (49, 5963), (82, 6167), (88, 6188), (108, 6269), (114, 6305), (129, 6371), (131, 6383), (136, 6416), (160, 6554), (194, 6779), (196, 6791), (208, 6893), (214, 6917), (219, 6941), (228, 7010), (229, 7016), (233, 7052), (238, 7079),

Gene: Vulture_5 Start: 4834, Stop: 6081, Start Num: 29

Candidate Starts for Vulture_5:

(Start: 29 @4834 has 6 MA's), (50, 4960), (111, 5224), (162, 5485), (163, 5488), (187, 5656), (192, 5689), (198, 5725), (199, 5728), (205, 5785),

Gene: WalkingDead_6 Start: 5390, Stop: 6574, Start Num: 30

Candidate Starts for WalkingDead_6:

(Start: 30 @5390 has 148 MA's), (42, 5450), (47, 5495), (56, 5567), (110, 5747), (133, 5837), (138, 5864), (163, 5999), (171, 6056), (172, 6059), (191, 6206), (217, 6365), (242, 6530), (244, 6551),

Gene: Wawa_8 Start: 7490, Stop: 8743, Start Num: 30

Candidate Starts for Wawa_8:

(Start: 30 @7490 has 148 MA's), (110, 7877), (111, 7886), (153, 8093), (162, 8147), (163, 8150), (165, 8168), (175, 8228), (187, 8318), (198, 8387), (199, 8390), (212, 8492), (219, 8540),

Gene: Wayne_8 Start: 7558, Stop: 8808, Start Num: 30

Candidate Starts for Wayne_8:

(Start: 30 @7558 has 148 MA's), (56, 7735), (84, 7867), (111, 7951), (114, 7966), (162, 8212), (163, 8215), (165, 8233), (187, 8383), (199, 8455), (203, 8479), (205, 8512), (212, 8557), (223, 8626), (224, 8635), (244, 8779),

Gene: Widow_5 Start: 4437, Stop: 5693, Start Num: 26

Candidate Starts for Widow_5:

(Start: 26 @4437 has 2 MA's), (41, 4494), (45, 4524), (54, 4617), (80, 4740), (87, 4767), (138, 4962), (174, 5172), (190, 5295), (200, 5352), (204, 5373), (211, 5442), (228, 5565), (234, 5610),

Gene: WonderBoy_5 Start: 4822, Stop: 6069, Start Num: 30

Candidate Starts for WonderBoy_5:

(Start: 30 @4822 has 148 MA's), (111, 5212), (115, 5230), (153, 5419), (162, 5473), (163, 5476), (165, 5494), (175, 5554), (187, 5644), (198, 5713), (199, 5716), (212, 5818), (219, 5866),

Gene: Xeno_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Xeno_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Xerxes_6 Start: 4372, Stop: 5664, Start Num: 23

Candidate Starts for Xerxes_6:

(Start: 23 @4372 has 59 MA's), (Start: 28 @4384 has 8 MA's), (45, 4468), (49, 4504), (55, 4561), (61, 4600), (71, 4633), (77, 4654), (81, 4681), (110, 4795), (112, 4819), (114, 4825), (123, 4861), (130, 4900), (136, 4936), (139, 4960), (154, 5053), (160, 5086), (164, 5116), (183, 5242), (195, 5320), (198, 5338), (202, 5362), (204, 5371), (214, 5443), (225, 5509), (228, 5536), (229, 5542),

Gene: Zorro_8 Start: 7469, Stop: 8722, Start Num: 30

Candidate Starts for Zorro_8:

(Start: 30 @7469 has 148 MA's), (110, 7856), (111, 7865), (153, 8072), (162, 8126), (163, 8129), (165, 8147), (175, 8207), (187, 8297), (198, 8366), (199, 8369), (212, 8471), (219, 8519),