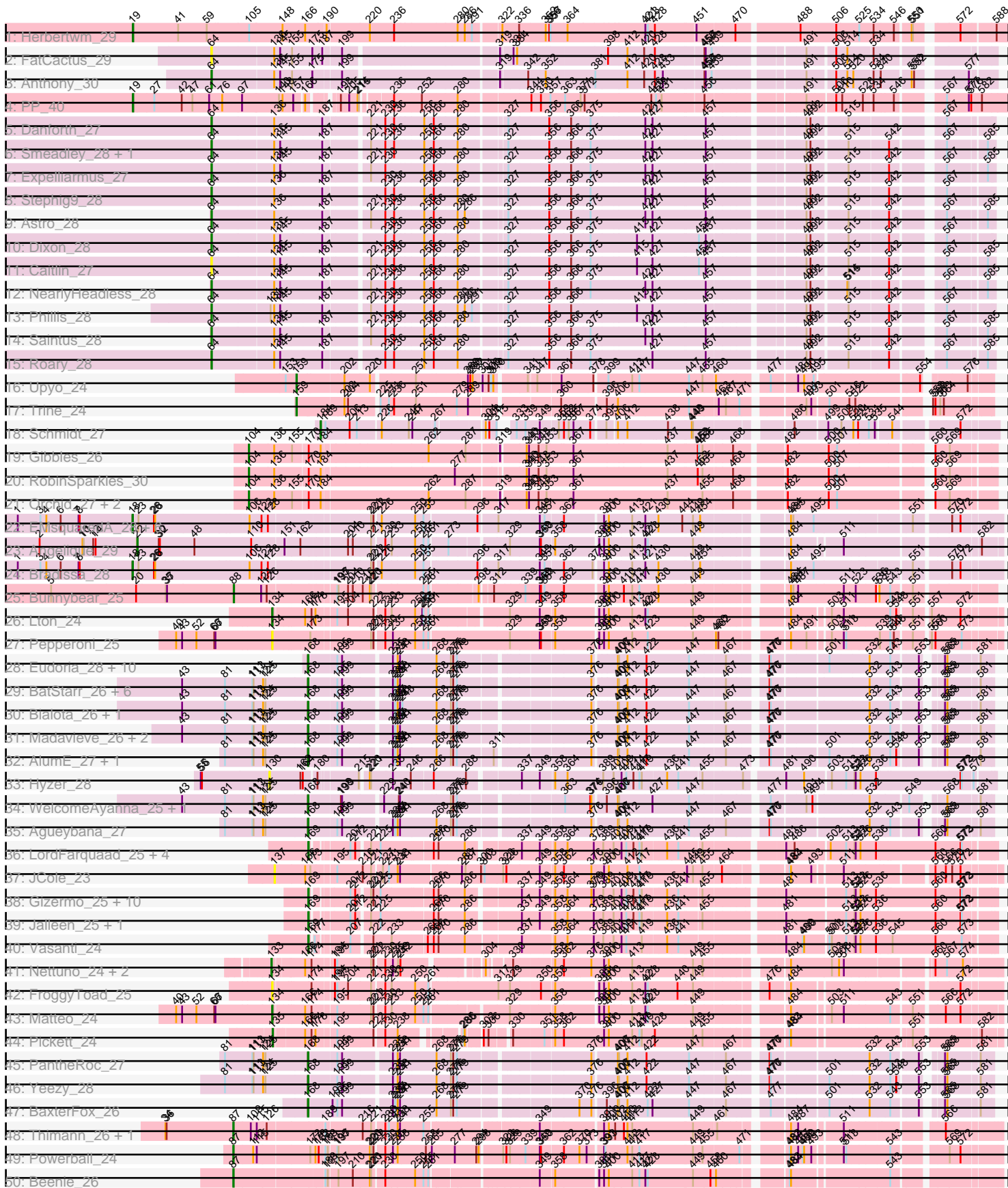
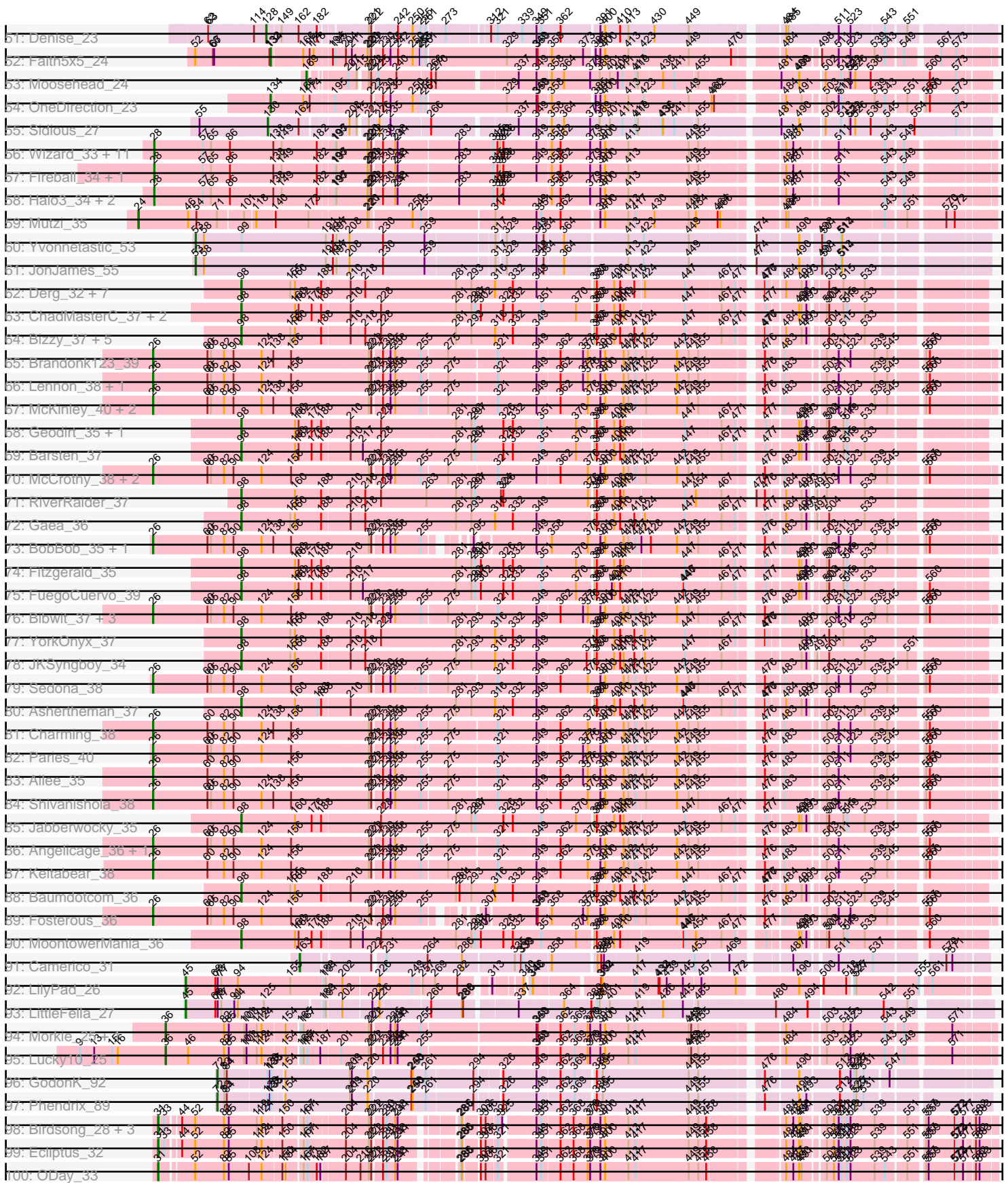


Pham 294387



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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 294387 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294387 has 275 members, 24 are drafts.

Phages represented in each track:

- Track 1 : Herbertwm_29
- Track 2 : FatCactus_29
- Track 3 : Anthony_30
- Track 4 : PP_40
- Track 5 : Danforth_27
- Track 6 : Smeadley_28, Groundhog_27
- Track 7 : Expelliarmus_27
- Track 8 : Stephig9_28
- Track 9 : Astro_28
- Track 10 : Dixon_28
- Track 11 : Caitlin_27
- Track 12 : NearlyHeadless_28
- Track 13 : Phillis_28
- Track 14 : Saintus_28
- Track 15 : Roary_28
- Track 16 : Upyo_24
- Track 17 : Trine_24
- Track 18 : Schmidt_27
- Track 19 : Gibbles_26
- Track 20 : RobinSparkles_30
- Track 21 : Orchid_27, Kampe_27, PatrickStar_27
- Track 22 : EMSquaredA_28, Pollux_28, BritBrat_28, Floral_28, Marteena_28, EnalisNailo_28, Lilas_28
- Track 23 : Angelique_29
- Track 24 : Bradissa_28
- Track 25 : Bunnybear_25
- Track 26 : Lton_24
- Track 27 : Pepperoni_25
- Track 28 : Eudoria_28, Polly_25, Suscepit_28, Zameen_28, Antonio_28, Neobush_28, Maridalia_27, Trumpet_28, Tayonia_28, Manasvini_28, Kita_28
- Track 29 : BatStarr_26, Nymphadora_26, TimTam_26, Bosnia_26, Herod_26, Hugley_26, Eviarto_26
- Track 30 : Bialota_26, Zirinka_26
- Track 31 : Madavieve_26, Madeline_26, Ohgeesy_26
- Track 32 : AlumE_27, BoyNamedSue_27
- Track 33 : Hyzer_28
- Track 34 : WelcomeAyanna_25, ThankyouJordi_25

- Track 35 : Agueybana_27
- Track 36 : LordFarquaad_25, Attis_25, Yeet412_25, Bjanes7_25, SoilAssassin_25
- Track 37 : JCole_23
- Track 38 : Gizermo_25, Haley23_25, GemG_25, Savage_25, Clap_25, Cynthia_25, Ebert_25, Sproutie_25, Mocha12_25, Whiteclaw_25, TuertoX_25
- Track 39 : Jalleen_25, Sahara_24
- Track 40 : Vasanti_24
- Track 41 : Nettuno_24, Lamberg_24, EdnaMode_24
- Track 42 : FroggyToad_25
- Track 43 : Matteo_24
- Track 44 : Pickett_24
- Track 45 : PantheRoc_27
- Track 46 : Yeezy_28
- Track 47 : BaxterFox_26
- Track 48 : Thimann_26, Suerte_24
- Track 49 : Powerball_24
- Track 50 : Beenie_26
- Track 51 : Denise_23
- Track 52 : Faith5x5_24
- Track 53 : Moosehead_24
- Track 54 : OneDirection_23
- Track 55 : Sidious_27
- Track 56 : Wizard_33, SmokingBunny_33, Gezellig_33, PullumCavea_33, Jambalaya_33, KimmyK_35, Phlop_33, Valary_36, Nubi_33, CherryCola_36, Togo_33, Savbucketdawg_33
- Track 57 : Fireball_34, TillyBobJoe_33
- Track 58 : Halo3_34, Evamon_33, Salvador_33
- Track 59 : Mutzi_35
- Track 60 : Yvonnetastic_53
- Track 61 : JonJames_55
- Track 62 : Derg_32, LilHam_34, Ribeye_37, Baddon_36, StorminNorm_36, Kwobi_38, Tycho_36, SchottB_35
- Track 63 : ChadMasterC_37, Kewpiedoll_36, Stultus_35
- Track 64 : Bizzy_37, Saronaya_36, Flatwoods_37, Tangerine_36, Kroos_37, Gustavo_36
- Track 65 : Brandonk123_39
- Track 66 : Lennon_38, Sitar_38
- Track 67 : McKinley_40, Vivi2_40, Tangent_38
- Track 68 : Geodirt_35, Sanjuju_35
- Track 69 : Barsten_37
- Track 70 : McCrothy_38, Nordenberg_32, Love_41
- Track 71 : RiverRaider_37
- Track 72 : Gaea_36
- Track 73 : BobBob_35, Rofo_38
- Track 74 : Fitzgerald_35
- Track 75 : FuegoCuervo_39
- Track 76 : Bibwit_37, Galadriel_38, Kamashten_36, Thing3_36
- Track 77 : YorkOnyx_37
- Track 78 : JKSyngboy_34
- Track 79 : Sedona_38
- Track 80 : Ashertheman_37
- Track 81 : Charming_38
- Track 82 : Paries_40

- Track 83 : Ailee_35
- Track 84 : Shivanishola_38
- Track 85 : Jabberwocky_35
- Track 86 : Angelicage_36, Affeca_36
- Track 87 : Keitabear_38
- Track 88 : Baumdotcom_36
- Track 89 : Fosterous_36
- Track 90 : MoontowerMania_36
- Track 91 : Camerico_31
- Track 92 : LilyPad_26
- Track 93 : LittleFella_27
- Track 94 : Morkie_25, PhorbessPhlower_25
- Track 95 : Lucky10_25
- Track 96 : GodonK_92
- Track 97 : Phendrix_89
- Track 98 : Birdsong_28, BearBQ_28, MortyNRick_28, Kuwabara_28
- Track 99 : Ecliptus_32
- Track 100 : ODay_33
- Track 101 : Whitney_30, Kamaru_29, Getalong_30, Budski_29, Holliday_29
- Track 102 : Periwinkle_31, Phistory_30, Horus_29, Frickyeah_28, Apricot_28, Leroy_29
- Track 103 : Phabuloso_28, Lutum_29, Kenna_28
- Track 104 : ShawBrad_29, Crater_27
- Track 105 : LitninMcQueen_28
- Track 106 : Asapag_29
- Track 107 : Squiddly_31, Spooky_29
- Track 108 : Forza_104, Boopy_104, Mareelih_102
- Track 109 : BlueNGold_103
- Track 110 : Sixama_102
- Track 111 : Sephiroth_30
- Track 112 : Syleon_30
- Track 113 : Kundefre_29
- Track 114 : Rabbitrun_32
- Track 115 : LilJank_30, Trax_30, Neville_30
- Track 116 : Malibo_28
- Track 117 : DonkeyMan_25
- Track 118 : Santhid_25
- Track 119 : Hibiscus_25, Heinz_25
- Track 120 : Jojo24_25
- Track 121 : Tarzan_25
- Track 122 : Reyja_26
- Track 123 : Crossroads_20, Zakai_20, MkaliMitinis3_20, Finemlucis_20
- Track 124 : Rumpelstiltskin_20
- Track 125 : LilDestine_20, Nicholasp3_20, Wilder_20, Kahlid_20, Underpass_20, Lynnae_20, Gardann_20
- Track 126 : Rossetti_20
- Track 127 : Bazzle_20
- Track 128 : Gabriela_20, Netyap_20, SoJulia_20, BobsGarage_20, Miley16_20, DrSeegs_20
- Track 129 : Loadrie_20, OverPar_20
- Track 130 : DanBing_19
- Track 131 : Breezona_20, Winky_20, Faith1_20, Itos_20
- Track 132 : DHan_20

- Track 133 : Vetrrix_20
- Track 134 : Baoshan_19, ZhongYanYuan_19
- Track 135 : Tourach_20
- Track 136 : Hafay_20, Soap141_20, Wigglewiggle_20, Sarshaun_20
- Track 137 : BigCheese_20
- Track 138 : Claus_20
- Track 139 : Archie_20
- Track 140 : GuuelaD_20
- Track 141 : Lewan_20
- Track 142 : Finkle_23
- Track 143 : GAL1_28
- Track 144 : TinyDot_26

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

The start number called the most often in the published annotations is 98, it was called in 30 of the 251 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ashertheman_37, Baddon_36, Barsten_37, Baumdotcom_36, Bizzy_37, ChadMasterC_37, Derg_32, Fitzgerald_35, Flatwoods_37, FuegoCuervo_39, Gaea_36, Geodirt_35, Gustavo_36, JKSyngboy_34, Jabberwocky_35, Kewpiedoll_36, Kroos_37, Kwobi_38, LilHam_34, MoontowerMania_36, Ribeye_37, RiverRaider_37, Sanjuju_35, Saronaya_36, SchottB_35, StorminNorm_36, Stultus_35, Tangerine_36, Tycho_36, YorkOnyx_37,

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

-

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

- Affeca_36, Agueybana_27, Ailee_35, AlumE_27, Angelicage_36, Angelique_29, Anthony_30, Antonio_28, Apricot_28, Archie_20, Asapag_29, Astro_28, Attis_25, Baoshan_19, BatStarr_26, BaxterFox_26, Bazzle_20, BearBQ_28, Beenie_26, Bialota_26, Bibwit_37, BigCheese_20, Birdsong_28, Bjaner7_25, BlueNGold_103, BobBob_35, BobsGarage_20, Boopy_104, Bosnia_26, BoyNamedSue_27, Bradissa_28, Brandonk123_39, Breezona_20, BritBrat_28, Budski_29, Bunnybear_25, Caitlin_27, Camerico_31, Charming_38, CherryCola_36, Clap_25, Claus_20, Crater_27, Crossroads_20, Cynthia_25, DHan_20, DanBing_19, Danforth_27, Denise_23, Dixon_28, DonkeyMan_25, DrSeegs_20, EMSquaredA_28, Ebert_25, Ecliptus_32, EdnaMode_24, EnalisNailo_28, Eudoria_28, Evamon_33, Eviarto_26, Expelliarmus_27, Faith1_20, Faith5x5_24, FatCactus_29, Finemlucis_20, Finkle_23, Fireball_34, Floral_28, Forza_104, Fosterous_36, Frickyeah_28, FroggyToad_25, GAL1_28, Gabriela_20, Galadriel_38, Gardann_20, GemG_25, Getalong_30, Gezellig_33, Gibbles_26, Gizermo_25, GodonK_92, Groundhog_27, GuuelaD_20, Hafay_20, Haley23_25, Halo3_34, Heinz_25, Herbertwm_29, Herod_26, Hibiscus_25, Holliday_29, Horus_29, Hugley_26, Hyzer_28, Itos_20, JCole_23, Jalleen_25, Jambalaya_33, Jojo24_25, JonJames_55, Kahlid_20, Kamaru_29, Kamashten_36, Kampe_27, Keitabear_38, Kenna_28, KimmyK_35, Kita_28, Kudrefre_29, Kuwabara_28, Lamberg_24, Lennon_38, Leroy_29, Lewan_20, LilDestine_20, LilJank_30, Lilas_28, LilyPad_26, LitninMcQueen_28, LittleFella_27,

Loadrie_20, LordFarquaad_25, Love_41, Lton_24, Lucky10_25, Lutum_29, Lynnae_20, Madavieve_26, Madeline_26, Malibo_28, Manasvini_28, Mareelih_102, Maridalia_27, Marteena_28, Matteo_24, McCrothy_38, McKinley_40, Miley16_20, MkaliMitinis3_20, Mocha12_25, Moosehead_24, Morkie_25, MortyNRick_28, Mutzi_35, NearlyHeadless_28, Neobush_28, Nettuno_24, Netyap_20, Neville_30, Nicholasp3_20, Nordenberg_32, Nubi_33, Nymphadora_26, ODay_33, Ohgeesy_26, OneDirection_23, Orchid_27, OverPar_20, PP_40, PantheRoc_27, Paries_40, PatrickStar_27, Pepperoni_25, Periwinkle_31, Phabuloso_28, Phendrix_89, Phillis_28, Phistory_30, Phlop_33, PhorbesPhlower_25, Pickett_24, Pollux_28, Polly_25, Powerball_24, PullumCavea_33, Rabbitrun_32, Reyja_26, Roary_28, RobinSparkles_30, Rofo_38, Rossetti_20, Rumpelstiltskin_20, Sahara_24, Saintus_28, Salvador_33, Santhid_25, Sarshaun_20, Savage_25, Savbucketdawg_33, Schmidt_27, Sedona_38, Sephiroth_30, ShawBrad_29, Shivanishola_38, Sidious_27, Sitar_38, Sixama_102, Smeadley_28, SmokingBunny_33, SoJulia_20, Soap141_20, SoilAssassin_25, Spooky_29, Sproutie_25, Squiddly_31, Stephig9_28, Suerte_24, Suscepit_28, Syleon_30, Tangent_38, Tarzan_25, Tayonia_28, ThankyouJordi_25, Thimann_26, Thing3_36, TillyBobJoe_33, TimTam_26, TinyDot_26, Togo_33, Tourach_20, Trax_30, Trine_24, Trumpet_28, TuertoX_25, Underpass_20, Upyo_24, Valary_36, Vasanti_24, Vetric_20, Vivi2_40, WelcomeAyanna_25, Whiteclaw_25, Whitney_30, Wigglewiggle_20, Wilder_20, Winky_20, Wizard_33, Yeet412_25, Yeezy_28, Yvonnestic_53, Zakai_20, Zameen_28, ZhongYanYuan_19, Zirinka_26,

Summary by start number:

Start 18:

- Found in 8 of 275 (2.9%) of genes in pham
- Manual Annotations of this start: 8 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bradissa_28 (CY1), BritBrat_28 (CY2), EMSquaredA_28 (CY1), EnalisNailo_28 (CY1), Floral_28 (CY1), Lilas_28 (CY1), Marteena_28 (CY1), Pollux_28 (CY1),

Start 19:

- Found in 2 of 275 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Herbertwm_29 (A2), PP_40 (A7),

Start 21:

- Found in 1 of 275 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GAL1_28 (singleton),

Start 22:

- Found in 1 of 275 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angelique_29 (CY1),

Start 24:

- Found in 1 of 275 (0.4%) of genes in pham

- Manual Annotations of this start: 1 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mutzi_35 (DC1),

Start 25:

- Found in 2 of 275 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Spooky_29 (DN2), Squiddly_31 (DN2),

Start 26:

- Found in 33 of 275 (12.0%) of genes in pham
- Manual Annotations of this start: 23 of 251
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Affeca_36 (DE1), Ailee_35 (DE1), Angelicage_36 (DE1), Bibwit_37 (DE1), BobBob_35 (DE1), Brandonk123_39 (DE1), Charming_38 (DE1), Fosterous_36 (DE1), Galadriel_38 (DE1), Kamashten_36 (DE1), Keitabear_38 (DE1), Lennon_38 (DE1), Love_41 (DE1), McCrothy_38 (DE1), McKinley_40 (DE1), Nordenberg_32 (DE1), Paries_40 (DE1), Rofo_38 (DE1), Sedona_38 (DE1), Shivanishola_38 (DE1), Sitar_38 (DE1), Tangent_38 (DE1), Thing3_36 (DE1), Vivi2_40 (DE1),

Start 28:

- Found in 25 of 275 (9.1%) of genes in pham
- Manual Annotations of this start: 17 of 251
- Called 68.0% of time when present
- Phage (with cluster) where this start called: CherryCola_36 (DC1), Evamon_33 (DC1), Fireball_34 (DC1), Gezellig_33 (DC1), Halo3_34 (DC1), Jambalaya_33 (DC1), KimmyK_35 (DC1), Nubi_33 (DC1), Phlop_33 (DC1), PullumCavea_33 (DC1), Salvador_33 (DC1), Savbucketdawg_33 (DC1), SmokingBunny_33 (DC1), TillyBobJoe_33 (DC1), Togo_33 (DC1), Valary_36 (DC1), Wizard_33 (DC1),

Start 31:

- Found in 24 of 275 (8.7%) of genes in pham
- Manual Annotations of this start: 22 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot_28 (DN3), Asapag_29 (DN1), BearBQ_28 (DN), Birdsong_28 (DN), Budski_29 (DN), Crater_27 (DN3), Ecliptus_32 (DN), Frickyeah_28 (DN1), Getalong_30 (DN1), Holliday_29 (DN1), Horus_29 (DN1), Kamaru_29 (DN1), Kenna_28 (DN1), Kuwabara_28 (DN4), Leroy_29 (DN1), LitninMcQueen_28 (DN1), Lutum_29 (DN1), MortyNRick_28 (DN), ODay_33 (DN), Periwinkle_31 (DN1), Phabuloso_28 (DN1), Phistory_30 (DN1), ShawBrad_29 (DN1), Whitney_30 (DN1),

Start 36:

- Found in 5 of 275 (1.8%) of genes in pham
- Manual Annotations of this start: 3 of 251
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Lucky10_25 (DH), Morkie_25 (DH), PhorbesPhlower_25 (DH),

Start 45:

- Found in 2 of 275 (0.7%) of genes in pham

- Manual Annotations of this start: 2 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilyPad_26 (DG1), LittleFella_27 (DG2),

Start 48:

- Found in 36 of 275 (13.1%) of genes in pham
- Manual Annotations of this start: 5 of 251
- Called 13.9% of time when present
- Phage (with cluster) where this start called: Breezona_20 (L2), Faith1_20 (L2), Itos_20 (L2), Rumpelstiltskin_20 (L2), Winky_20 (L2),

Start 51:

- Found in 41 of 275 (14.9%) of genes in pham
- Manual Annotations of this start: 26 of 251
- Called 87.8% of time when present
- Phage (with cluster) where this start called: Archie_20 (L2), Baoshan_19 (L2), Bazzle_20 (L2), BigCheese_20 (L2), BobsGarage_20 (L2), Claus_20 (L2), Crossroads_20 (L2), DHan_20 (L2), DanBing_19 (L2), DrSeegs_20 (L2), Finemlucis_20 (L2), Gabriela_20 (L2), Gardann_20 (L2), GuuelaD_20 (L2), Hafay_20 (L2), Kahlid_20 (L2), Lewan_20 (L2), LilDestine_20 (L2), Loadrie_20 (L2), Lynnae_20 (L2), Miley16_20 (L2), MkaliMitinis3_20 (L2), Netyap_20 (L2), Nicholasp3_20 (L2), OverPar_20 (L2), Rossetti_20 (L2), Sarshaun_20 (L2), SoJulia_20 (L2), Soap141_20 (L2), Tourach_20 (L2), Underpass_20 (L2), Vetrix_20 (L2), Wigglewiggles_20 (L2), Wilder_20 (L2), Zakai_20 (L2), ZhongYanYuan_19 (L2),

Start 53:

- Found in 2 of 275 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JonJames_55 (DD), Yvonnetastic_53 (DD),

Start 64:

- Found in 19 of 275 (6.9%) of genes in pham
- Manual Annotations of this start: 12 of 251
- Called 73.7% of time when present
- Phage (with cluster) where this start called: Anthony_30 (A20), Astro_28 (A8), Caitlin_27 (A8), Danforth_27 (A8), Dixon_28 (A8), Expelliarmus_27 (A8), FatCactus_29 (A20), Groundhog_27 (A8), NearlyHeadless_28 (A8), Phillis_28 (A8), Roary_28 (A8), Saintus_28 (A8), Smeadley_28 (A8), Stephig9_28 (A8),

Start 69:

- Found in 1 of 275 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Malibo_28 (DW),

Start 72:

- Found in 6 of 275 (2.2%) of genes in pham
- Manual Annotations of this start: 5 of 251
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Boopy_104 (DS), Forza_104 (DS), GodonK_92 (DK), Mareelih_102 (DS), Phendrix_89 (DK),

Start 74:

- Found in 1 of 275 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sixama_102 (DS),

Start 78:

- Found in 1 of 275 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DonkeyMan_25 (DY),

Start 79:

- Found in 19 of 275 (6.9%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 5.3% of time when present
- Phage (with cluster) where this start called: Reyja_26 (DY),

Start 80:

- Found in 2 of 275 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jojo24_25 (DY), Santhid_25 (DY),

Start 81:

- Found in 20 of 275 (7.3%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Tarzan_25 (DY),

Start 87:

- Found in 4 of 275 (1.5%) of genes in pham
- Manual Annotations of this start: 4 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beenie_26 (CZ4), Powerball_24 (CZ4), Suerte_24 (CZ4), Thimann_26 (CZ4),

Start 88:

- Found in 1 of 275 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bunnybear_25 (CZ),

Start 92:

- Found in 7 of 275 (2.5%) of genes in pham
- Manual Annotations of this start: 5 of 251
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Kudrefre_29 (DU1), LilJank_30 (DU2), Neville_30 (DU2), Sephiroth_30 (DU1), Syleon_30 (DU1), Trax_30 (DU2),

Start 93:

- Found in 5 of 275 (1.8%) of genes in pham

- Manual Annotations of this start: 1 of 251
- Called 20.0% of time when present
- Phage (with cluster) where this start called: BlueNGold_103 (DS),

Start 95:

- Found in 1 of 275 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rabbitrun_32 (DU2),

Start 98:

- Found in 30 of 275 (10.9%) of genes in pham
- Manual Annotations of this start: 30 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ashertheman_37 (DE1), Baddon_36 (DE1), Barsten_37 (DE1), Baumdotcom_36 (DE1), Bizzy_37 (DE1), ChadMasterC_37 (DE1), Derg_32 (DE1), Fitzgerald_35 (DE1), Flatwoods_37 (DE1), FuegoCuervo_39 (DE1), Gaea_36 (DE1), Geodirt_35 (DE1), Gustavo_36 (DE1), JKSyngboy_34 (DE1), Jabberwocky_35 (DE1), Kewpiedoll_36 (DE1), Kroos_37 (DE1), Kwobi_38 (DE1), LilHam_34 (DE1), MoontowerMania_36 (DE1), Ribeye_37 (DE1), RiverRaider_37 (DE1), Sanjuju_35 (DE1), Saronaya_36 (DE1), SchottB_35 (DE1), StorminNorm_36 (DE1), Stultus_35 (DE1), Tangerine_36 (DE1), Tycho_36 (DE1), YorkOnyx_37 (DE1),

Start 101:

- Found in 5 of 275 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Finkle_23 (singleton),

Start 104:

- Found in 5 of 275 (1.8%) of genes in pham
- Manual Annotations of this start: 5 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gibbles_26 (CX), Kampe_27 (CX), Orchid_27 (CX), PatrickStar_27 (CX), RobinSparkles_30 (CX),

Start 128:

- Found in 29 of 275 (10.5%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 3.4% of time when present
- Phage (with cluster) where this start called: Denise_23 (CZ5),

Start 130:

- Found in 2 of 275 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hyzer_28 (CZ1), Sidious_27 (CZ7),

Start 133:

- Found in 10 of 275 (3.6%) of genes in pham
- Manual Annotations of this start: 3 of 251
- Called 30.0% of time when present

- Phage (with cluster) where this start called: EdnaMode_24 (CZ2), Lamberg_24 (CZ2), Nettuno_24 (CZ2),

Start 134:

- Found in 7 of 275 (2.5%) of genes in pham
- Manual Annotations of this start: 5 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Faith5x5_24 (CZ6), FroggyToad_25 (CZ2), Lton_24 (CZ), Matteo_24 (CZ2), OneDirection_23 (CZ6), Pepperoni_25 (CZ), TinyDot_26 (singleton),

Start 135:

- Found in 8 of 275 (2.9%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Pickett_24 (CZ2),

Start 137:

- Found in 1 of 275 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JCole_23 (CZ2),

Start 159:

- Found in 2 of 275 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trine_24 (CD), Upyo_24 (CD),

Start 161:

- Found in 2 of 275 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Heinz_25 (DY), Hibiscus_25 (DY),

Start 163:

- Found in 1 of 275 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Camerico_31 (DF4),

Start 168:

- Found in 31 of 275 (11.3%) of genes in pham
- Manual Annotations of this start: 29 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agueybana_27 (CZ1), AlumE_27 (CZ1), Antonio_28 (CZ1), BatStarr_26 (CZ1), BaxterFox_26 (CZ3), Bialota_26 (CZ1), Bosnia_26 (CZ1), BoyNamedSue_27 (CZ1), Eudoria_28 (CZ1), Eviarto_26 (CZ1), Herod_26 (CZ1), Hugley_26 (CZ1), Kita_28 (CZ1), Madavieve_26 (CZ1), Madeline_26 (CZ1), Manasvini_28 (CZ1), Maridalia_27 (CZ1), Neobush_28 (CZ1), Nymphadora_26 (CZ1), Ohgeesy_26 (CZ), PantheRoc_27 (CZ3), Polly_25 (CZ1), Suscepit_28 (CZ1), Tayonia_28 (CZ1), ThankyouJordi_25 (CZ1), TimTam_26 (CZ1), Trumpet_28 (CZ1), WelcomeAyanna_25 (CZ1), Yeezy_28 (CZ3), Zameen_28 (CZ1),

Zirinka_26 (CZ1),

Start 169:

- Found in 20 of 275 (7.3%) of genes in pham
- Manual Annotations of this start: 19 of 251
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Attis_25 (CZ2), Bjaner7_25 (CZ2), Clap_25 (CZ2), Cynthia_25 (CZ2), Ebert_25 (CZ2), GemG_25 (CZ2), Gizermo_25 (CZ2), Haley23_25 (CZ2), Jalleen_25 (CZ2), LordFarquaad_25 (CZ2), Mocha12_25 (CZ2), Moosehead_24 (CZ6), Sahara_24 (CZ2), Savage_25 (CZ2), SoilAssassin_25 (CZ2), Sproutie_25 (CZ2), TuertoX_25 (CZ2), Vasanti_24 (CZ2), Whiteclaw_25 (CZ2), Yeet412_25 (CZ2),

Start 184:

- Found in 9 of 275 (3.3%) of genes in pham
- Manual Annotations of this start: 1 of 251
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Schmidt_27 (CU4),

Summary by clusters:

There are 37 clusters represented in this pham: DN, singleton, DK, DH, CZ2, CZ3, DD, CZ1, CZ6, CZ7, CZ4, CZ5, DY, DW, DS, CU4, DF4, DN4, A2, DN1, DN3, DN2, DU1, DU2, CY2, CY1, A7, CD, DG2, CZ, CX, L2, A8, DC1, A20, DE1, DG1,

Info for manual annotations of cluster A2:

- Start number 19 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A20:

- Start number 64 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A7:

- Start number 19 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A8:

- Start number 64 was manually annotated 11 times for cluster A8.

Info for manual annotations of cluster CD:

- Start number 159 was manually annotated 2 times for cluster CD.

Info for manual annotations of cluster CU4:

- Start number 184 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CX:

- Start number 104 was manually annotated 5 times for cluster CX.

Info for manual annotations of cluster CY1:

- Start number 18 was manually annotated 7 times for cluster CY1.
- Start number 22 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 18 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ:

- Start number 88 was manually annotated 1 time for cluster CZ.
- Start number 134 was manually annotated 1 time for cluster CZ.
- Start number 168 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 168 was manually annotated 25 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 133 was manually annotated 3 times for cluster CZ2.
- Start number 134 was manually annotated 1 time for cluster CZ2.
- Start number 135 was manually annotated 1 time for cluster CZ2.
- Start number 169 was manually annotated 18 times for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 168 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ4:

- Start number 87 was manually annotated 4 times for cluster CZ4.

Info for manual annotations of cluster CZ5:

- Start number 128 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 134 was manually annotated 2 times for cluster CZ6.
- Start number 169 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster CZ7:

- Start number 130 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DC1:

- Start number 24 was manually annotated 1 time for cluster DC1.
- Start number 28 was manually annotated 17 times for cluster DC1.

Info for manual annotations of cluster DD:

- Start number 53 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DE1:

- Start number 26 was manually annotated 23 times for cluster DE1.
- Start number 98 was manually annotated 30 times for cluster DE1.

Info for manual annotations of cluster DF4:

- Start number 163 was manually annotated 1 time for cluster DF4.

Info for manual annotations of cluster DG1:

- Start number 45 was manually annotated 1 time for cluster DG1.

Info for manual annotations of cluster DG2:

- Start number 45 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster DH:

- Start number 36 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DK:

- Start number 72 was manually annotated 2 times for cluster DK.

Info for manual annotations of cluster DN:

- Start number 31 was manually annotated 6 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 31 was manually annotated 13 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 25 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 31 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 31 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DS:

- Start number 72 was manually annotated 3 times for cluster DS.
- Start number 74 was manually annotated 1 time for cluster DS.
- Start number 93 was manually annotated 1 time for cluster DS.

Info for manual annotations of cluster DU1:

- Start number 92 was manually annotated 3 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 92 was manually annotated 2 times for cluster DU2.
- Start number 95 was manually annotated 1 time for cluster DU2.

Info for manual annotations of cluster DW:

- Start number 69 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster DY:

- Start number 78 was manually annotated 1 time for cluster DY.
- Start number 79 was manually annotated 1 time for cluster DY.
- Start number 80 was manually annotated 2 times for cluster DY.
- Start number 81 was manually annotated 1 time for cluster DY.
- Start number 161 was manually annotated 2 times for cluster DY.

Info for manual annotations of cluster L2:

- Start number 48 was manually annotated 5 times for cluster L2.
- Start number 51 was manually annotated 26 times for cluster L2.

Gene Information:

Gene: Affeca_36 Start: 33574, Stop: 35496, Start Num: 26

Candidate Starts for Affeca_36:

(Start: 26 @33574 has 23 MA's), (60, 33709), (65, 33718), (82, 33751), (90, 33775), (124, 33844), (156, 33919), (221, 34111), (222, 34117), (230, 34138), (235, 34156), (238, 34168), (255, 34228), (275, 34282), (321, 34396), (349, 34483), (362, 34537), (376, 34603), (391, 34633), (400, 34645),

(412, 34690), (413, 34702), (417, 34720), (425, 34747), (442, 34825), (449, 34852), (455, 34876), (476, 34999), (483, 35041), (503, 35125), (511, 35155), (539, 35236), (545, 35266), (557, 35338), (560, 35347),

Gene: Agueybana_27 Start: 22803, Stop: 24308, Start Num: 168

Candidate Starts for Agueybana_27:

(Start: 81 @22596 has 1 MA's), (111, 22665), (113, 22668), (124, 22692), (125, 22698), (Start: 168 @22803 has 29 MA's), (195, 22872), (199, 22884), (235, 22995), (237, 23001), (238, 23007), (241, 23013), (268, 23100), (275, 23136), (276, 23142), (279, 23151), (376, 23445), (406, 23499), (407, 23502), (412, 23523), (447, 23673), (467, 23757), (476, 23838), (477, 23841), (532, 24060), (543, 24108), (553, 24168), (565, 24201), (568, 24207), (581, 24279),

Gene: Ailee_35 Start: 33459, Stop: 35381, Start Num: 26

Candidate Starts for Ailee_35:

(Start: 26 @33459 has 23 MA's), (60, 33594), (82, 33636), (90, 33660), (156, 33804), (221, 33996), (222, 34002), (230, 34023), (235, 34041), (238, 34053), (255, 34113), (275, 34167), (321, 34281), (349, 34368), (362, 34422), (373, 34476), (376, 34488), (391, 34518), (400, 34530), (412, 34575), (413, 34587), (417, 34605), (425, 34632), (442, 34710), (449, 34737), (455, 34761), (476, 34884), (483, 34926), (503, 35010), (511, 35040), (539, 35121), (545, 35151), (557, 35223), (560, 35232),

Gene: AlumE_27 Start: 22802, Stop: 24307, Start Num: 168

Candidate Starts for AlumE_27:

(Start: 81 @22595 has 1 MA's), (111, 22664), (113, 22667), (124, 22691), (125, 22697), (Start: 168 @22802 has 29 MA's), (195, 22871), (199, 22883), (235, 22994), (237, 23000), (238, 23006), (241, 23012), (268, 23099), (275, 23135), (276, 23141), (279, 23150), (311, 23234), (376, 23444), (406, 23498), (407, 23501), (412, 23522), (422, 23567), (447, 23672), (467, 23756), (476, 23837), (477, 23840), (501, 23963), (532, 24059), (543, 24107), (548, 24122), (553, 24167), (565, 24200), (568, 24206), (581, 24278),

Gene: Angelicage_36 Start: 33992, Stop: 35914, Start Num: 26

Candidate Starts for Angelicage_36:

(Start: 26 @33992 has 23 MA's), (60, 34127), (65, 34136), (82, 34169), (90, 34193), (124, 34262), (156, 34337), (221, 34529), (222, 34535), (230, 34556), (235, 34574), (238, 34586), (255, 34646), (275, 34700), (321, 34814), (349, 34901), (362, 34955), (376, 35021), (391, 35051), (400, 35063), (412, 35108), (413, 35120), (417, 35138), (425, 35165), (442, 35243), (449, 35270), (455, 35294), (476, 35417), (483, 35459), (503, 35543), (511, 35573), (539, 35654), (545, 35684), (557, 35756), (560, 35765),

Gene: Angelique_29 Start: 23414, Stop: 25348, Start Num: 22

Candidate Starts for Angelique_29:

(2, 23168), (10, 23276), (11, 23279), (12, 23303), (14, 23309), (Start: 22 @23414 has 1 MA's), (30, 23468), (32, 23471), (Start: 48 @23558 has 5 MA's), (110, 23699), (151, 23777), (162, 23816), (204, 23918), (210, 23930), (221, 23975), (230, 24002), (233, 24017), (250, 24071), (255, 24092), (261, 24104), (273, 24140), (329, 24269), (349, 24335), (350, 24338), (358, 24368), (385, 24467), (391, 24479), (400, 24491), (413, 24548), (421, 24581), (423, 24587), (449, 24698), (484, 24890), (511, 25001), (582, 25301),

Gene: Anthony_30 Start: 21219, Stop: 22928, Start Num: 64

Candidate Starts for Anthony_30:

(Start: 64 @21219 has 12 MA's), (136, 21366), (145, 21381), (155, 21408), (175, 21456), (199, 21513), (319, 21867), (342, 21930), (352, 21966), (381, 22080), (412, 22158), (420, 22197), (428, 22224), (433, 22242), (456, 22332), (457, 22335), (459, 22350), (491, 22536), (506, 22596), (514, 22623), (520, 22638), (534, 22683), (540, 22701), (550, 22764), (552, 22770), (577, 22872),

Gene: Antonio_28 Start: 22923, Stop: 24428, Start Num: 168

Candidate Starts for Antonio_28:

(Start: 168 @22923 has 29 MA's), (195, 22992), (199, 23004), (235, 23115), (238, 23127), (241, 23133), (268, 23220), (275, 23256), (276, 23262), (279, 23271), (376, 23565), (406, 23619), (407, 23622), (412, 23643), (422, 23688), (447, 23793), (467, 23877), (476, 23958), (477, 23961), (501, 24084), (532, 24180), (543, 24228), (553, 24288), (565, 24321), (568, 24327), (581, 24399),

Gene: Apricot_28 Start: 21679, Stop: 23514, Start Num: 31

Candidate Starts for Apricot_28:

(Start: 31 @21679 has 22 MA's), (Start: 79 @21841 has 1 MA's), (91, 21871), (116, 21925), (124, 21940), (Start: 128 @21952 has 1 MA's), (129, 21955), (140, 21970), (142, 21973), (144, 21976), (182, 22066), (187, 22075), (189, 22078), (216, 22165), (221, 22186), (222, 22192), (230, 22213), (231, 22222), (238, 22243), (241, 22249), (285, 22351), (286, 22354), (302, 22384), (306, 22396), (321, 22420), (325, 22429), (349, 22495), (351, 22507), (362, 22549), (368, 22582), (376, 22615), (379, 22621), (391, 22645), (400, 22657), (413, 22714), (417, 22732), (449, 22864), (455, 22888), (458, 22906), (484, 23059), (487, 23074), (490, 23089), (491, 23095), (503, 23140), (508, 23158), (511, 23170), (513, 23176), (519, 23188), (523, 23197), (539, 23251), (551, 23320), (557, 23353), (559, 23359), (572, 23422), (573, 23425), (577, 23443), (582, 23464), (583, 23473),

Gene: Archie_20 Start: 19444, Stop: 21240, Start Num: 51

Candidate Starts for Archie_20:

(Start: 48 @19441 has 5 MA's), (Start: 51 @19444 has 26 MA's), (89, 19540), (117, 19597), (127, 19621), (146, 19657), (166, 19717), (170, 19726), (182, 19750), (192, 19771), (211, 19828), (234, 19921), (243, 19945), (251, 19975), (270, 20029), (280, 20074), (299, 20125), (340, 20230), (356, 20284), (371, 20362), (372, 20371), (390, 20419), (392, 20422), (394, 20425), (404, 20449), (418, 20509), (420, 20518), (456, 20656), (457, 20659), (476, 20788), (484, 20827), (487, 20842), (503, 20902), (505, 20911), (513, 20938), (525, 20971), (530, 20986), (560, 21112), (566, 21136), (584, 21223),

Gene: Asapag_29 Start: 22121, Stop: 23956, Start Num: 31

Candidate Starts for Asapag_29:

(Start: 31 @22121 has 22 MA's), (Start: 79 @22283 has 1 MA's), (91, 22313), (116, 22367), (124, 22382), (Start: 128 @22394 has 1 MA's), (129, 22397), (140, 22412), (142, 22415), (144, 22418), (182, 22508), (187, 22517), (189, 22520), (216, 22607), (221, 22628), (222, 22634), (230, 22655), (238, 22685), (241, 22691), (285, 22793), (286, 22796), (302, 22826), (306, 22838), (321, 22862), (325, 22871), (349, 22937), (351, 22949), (362, 22991), (368, 23024), (376, 23057), (379, 23063), (391, 23087), (400, 23099), (413, 23156), (417, 23174), (449, 23306), (455, 23330), (458, 23348), (484, 23501), (487, 23516), (490, 23531), (491, 23537), (503, 23582), (508, 23600), (511, 23612), (513, 23618), (519, 23630), (523, 23639), (539, 23693), (551, 23762), (557, 23795), (559, 23801), (572, 23864), (573, 23867), (577, 23885), (582, 23906), (583, 23915),

Gene: Ashertheman_37 Start: 32252, Stop: 33973, Start Num: 98

Candidate Starts for Ashertheman_37:

(Start: 98 @32252 has 30 MA's), (160, 32387), (183, 32444), (188, 32453), (210, 32522), (281, 32783), (293, 32822), (316, 32882), (332, 32927), (349, 32987), (383, 33122), (386, 33128), (406, 33170), (410, 33185), (416, 33221), (424, 33242), (446, 33338), (447, 33341), (467, 33425), (471, 33458), (476, 33503), (477, 33506), (484, 33542), (491, 33578), (493, 33590), (504, 33626), (533, 33716),

Gene: Astro_28 Start: 21515, Stop: 23236, Start Num: 64

Candidate Starts for Astro_28:

(Start: 64 @21515 has 12 MA's), (136, 21659), (187, 21773), (221, 21863), (230, 21899), (236, 21920), (256, 21992), (266, 22016), (280, 22070), (286, 22088), (327, 22172), (356, 22268), (366, 22322),

(375, 22370), (421, 22499), (427, 22517), (457, 22643), (491, 22847), (492, 22856), (515, 22937), (542, 23033), (567, 23132), (585, 23219),

Gene: Attis_25 Start: 20498, Stop: 22021, Start Num: 169

Candidate Starts for Attis_25:

(Start: 169 @20498 has 19 MA's), (207, 20570), (212, 20582), (221, 20609), (225, 20633), (266, 20753), (270, 20762), (286, 20828), (337, 20942), (349, 20984), (358, 21014), (364, 21044), (379, 21110), (389, 21134), (401, 21158), (409, 21176), (411, 21188), (414, 21206), (417, 21221), (419, 21227), (436, 21278), (441, 21305), (455, 21356), (481, 21524), (486, 21545), (502, 21623), (513, 21662), (521, 21683), (523, 21686), (526, 21698), (536, 21737), (560, 21884), (572, 21944), (573, 21947),

Gene: Baddon_36 Start: 33049, Stop: 34770, Start Num: 98

Candidate Starts for Baddon_36:

(Start: 98 @33049 has 30 MA's), (155, 33172), (160, 33184), (188, 33250), (210, 33319), (218, 33355), (281, 33580), (293, 33619), (316, 33679), (332, 33724), (349, 33784), (383, 33919), (386, 33925), (406, 33967), (410, 33982), (416, 34018), (424, 34039), (447, 34138), (467, 34222), (471, 34255), (476, 34300), (477, 34303), (484, 34339), (491, 34375), (493, 34387), (504, 34423), (515, 34459), (533, 34513),

Gene: Baoshan_19 Start: 19053, Stop: 20849, Start Num: 51

Candidate Starts for Baoshan_19:

(Start: 51 @19053 has 26 MA's), (100, 19173), (111, 19194), (117, 19206), (127, 19230), (141, 19257), (166, 19326), (170, 19335), (187, 19368), (192, 19380), (201, 19410), (211, 19437), (243, 19554), (254, 19602), (270, 19638), (280, 19683), (299, 19734), (340, 19839), (345, 19857), (355, 19890), (356, 19893), (363, 19932), (371, 19971), (392, 20031), (394, 20034), (418, 20118), (456, 20265), (471, 20343), (484, 20436), (487, 20451), (503, 20511), (505, 20520), (513, 20547), (530, 20595), (534, 20610), (551, 20694), (552, 20697), (566, 20745), (570, 20760), (584, 20832),

Gene: Barsten_37 Start: 32600, Stop: 34321, Start Num: 98

Candidate Starts for Barsten_37:

(Start: 98 @32600 has 30 MA's), (160, 32735), (162, 32744), (176, 32777), (188, 32801), (210, 32870), (217, 32900), (228, 32945), (281, 33131), (293, 33170), (297, 33179), (326, 33251), (332, 33275), (351, 33347), (370, 33434), (383, 33470), (386, 33476), (406, 33518), (410, 33533), (412, 33542), (447, 33689), (467, 33773), (471, 33806), (477, 33854), (490, 33920), (491, 33926), (493, 33938), (503, 33968), (504, 33974), (515, 34010), (519, 34019), (533, 34064),

Gene: BatStarr_26 Start: 22926, Stop: 24431, Start Num: 168

Candidate Starts for BatStarr_26:

(43, 22611), (Start: 81 @22719 has 1 MA's), (111, 22788), (113, 22791), (124, 22815), (125, 22821), (Start: 168 @22926 has 29 MA's), (195, 22995), (199, 23007), (235, 23118), (237, 23124), (238, 23130), (241, 23136), (268, 23223), (275, 23259), (276, 23265), (279, 23274), (376, 23568), (406, 23622), (407, 23625), (412, 23646), (422, 23691), (447, 23796), (467, 23880), (476, 23961), (477, 23964), (532, 24183), (543, 24231), (553, 24291), (565, 24324), (568, 24330), (581, 24402),

Gene: Baumdotcom_36 Start: 31904, Stop: 33625, Start Num: 98

Candidate Starts for Baumdotcom_36:

(Start: 98 @31904 has 30 MA's), (155, 32027), (160, 32039), (188, 32105), (210, 32174), (281, 32435), (284, 32444), (293, 32474), (316, 32534), (332, 32579), (349, 32639), (383, 32774), (386, 32780), (406, 32822), (410, 32837), (416, 32873), (424, 32894), (447, 32993), (467, 33077), (471, 33110), (476, 33155), (477, 33158), (484, 33194), (491, 33230), (493, 33242), (504, 33278), (533, 33368),

Gene: BaxterFox_26 Start: 22126, Stop: 23631, Start Num: 168

Candidate Starts for BaxterFox_26:

(Start: 168 @22126 has 29 MA's), (193, 22183), (195, 22195), (199, 22207), (235, 22318), (237, 22324), (238, 22330), (241, 22336), (268, 22423), (275, 22459), (276, 22465), (279, 22474), (370, 22738), (376, 22768), (396, 22795), (406, 22822), (407, 22825), (412, 22846), (423, 22894), (427, 22906), (447, 22996), (467, 23080), (477, 23164), (501, 23287), (532, 23383), (543, 23431), (553, 23491), (565, 23524), (568, 23530), (581, 23602),

Gene: Bazzle_20 Start: 19193, Stop: 20989, Start Num: 51

Candidate Starts for Bazzle_20:

(Start: 48 @19190 has 5 MA's), (Start: 51 @19193 has 26 MA's), (117, 19346), (127, 19370), (146, 19406), (166, 19466), (170, 19475), (182, 19499), (192, 19520), (211, 19577), (234, 19670), (243, 19694), (251, 19724), (270, 19778), (280, 19823), (299, 19874), (340, 19979), (356, 20033), (371, 20111), (372, 20120), (390, 20168), (392, 20171), (394, 20174), (404, 20198), (418, 20258), (420, 20267), (456, 20405), (457, 20408), (476, 20537), (484, 20576), (487, 20591), (503, 20651), (505, 20660), (513, 20687), (525, 20720), (530, 20735), (560, 20861), (566, 20885), (584, 20972),

Gene: BearBQ_28 Start: 22958, Stop: 24742, Start Num: 31

Candidate Starts for BearBQ_28:

(Start: 31 @22958 has 22 MA's), (33, 22973), (44, 23000), (52, 23030), (82, 23102), (85, 23114), (119, 23177), (124, 23189), (150, 23231), (167, 23270), (171, 23279), (204, 23357), (221, 23414), (222, 23420), (230, 23441), (231, 23450), (238, 23471), (241, 23477), (285, 23579), (286, 23582), (302, 23612), (306, 23624), (321, 23648), (325, 23657), (349, 23723), (351, 23735), (362, 23777), (368, 23810), (376, 23843), (379, 23849), (391, 23873), (400, 23885), (413, 23942), (417, 23960), (449, 24092), (455, 24116), (458, 24134), (484, 24287), (487, 24302), (490, 24317), (491, 24323), (503, 24368), (508, 24386), (511, 24398), (513, 24404), (519, 24416), (523, 24425), (539, 24479), (551, 24548), (557, 24581), (559, 24587), (572, 24650), (573, 24653), (577, 24671), (582, 24692), (583, 24701),

Gene: Beenie_26 Start: 22391, Stop: 24076, Start Num: 87

Candidate Starts for Beenie_26:

(Start: 87 @22391 has 4 MA's), (189, 22601), (191, 22607), (197, 22628), (210, 22664), (220, 22706), (221, 22709), (230, 22736), (250, 22805), (255, 22826), (261, 22838), (349, 23066), (358, 23099), (385, 23198), (391, 23210), (400, 23222), (413, 23279), (417, 23297), (421, 23312), (423, 23318), (449, 23429), (458, 23471), (460, 23480), (483, 23618), (484, 23621), (543, 23843),

Gene: Bialota_26 Start: 22938, Stop: 24443, Start Num: 168

Candidate Starts for Bialota_26:

(43, 22623), (Start: 81 @22731 has 1 MA's), (111, 22800), (113, 22803), (124, 22827), (125, 22833), (Start: 168 @22938 has 29 MA's), (195, 23007), (199, 23019), (235, 23130), (237, 23136), (238, 23142), (241, 23148), (243, 23154), (268, 23235), (275, 23271), (276, 23277), (279, 23286), (376, 23580), (406, 23634), (407, 23637), (412, 23658), (422, 23703), (447, 23808), (467, 23892), (476, 23973), (477, 23976), (532, 24195), (543, 24243), (553, 24303), (565, 24336), (568, 24342), (581, 24414),

Gene: Bibwit_37 Start: 33393, Stop: 35315, Start Num: 26

Candidate Starts for Bibwit_37:

(Start: 26 @33393 has 23 MA's), (60, 33528), (65, 33537), (82, 33570), (90, 33594), (124, 33663), (156, 33738), (221, 33930), (222, 33936), (230, 33957), (235, 33975), (238, 33987), (255, 34047), (275, 34101), (321, 34215), (349, 34302), (362, 34356), (373, 34410), (376, 34422), (391, 34452), (400, 34464), (412, 34509), (413, 34521), (417, 34539), (425, 34566), (442, 34644), (449, 34671), (455, 34695), (476, 34818), (483, 34860), (503, 34944), (511, 34974), (523, 35001), (539, 35055), (545, 35085), (557, 35157), (560, 35166),

Gene: BigCheese_20 Start: 19228, Stop: 21024, Start Num: 51

Candidate Starts for BigCheese_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371, 20146), (390, 20203), (394, 20209), (418, 20293), (420, 20302), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (513, 20722), (520, 20740), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: Birdsong_28 Start: 21851, Stop: 23635, Start Num: 31

Candidate Starts for Birdsong_28:

(Start: 31 @21851 has 22 MA's), (33, 21866), (44, 21893), (52, 21923), (82, 21995), (85, 22007), (119, 22070), (124, 22082), (150, 22124), (167, 22163), (171, 22172), (204, 22250), (221, 22307), (222, 22313), (230, 22334), (231, 22343), (238, 22364), (241, 22370), (285, 22472), (286, 22475), (302, 22505), (306, 22517), (321, 22541), (325, 22550), (349, 22616), (351, 22628), (362, 22670), (368, 22703), (376, 22736), (379, 22742), (391, 22766), (400, 22778), (413, 22835), (417, 22853), (449, 22985), (455, 23009), (458, 23027), (484, 23180), (487, 23195), (490, 23210), (491, 23216), (503, 23261), (508, 23279), (511, 23291), (513, 23297), (519, 23309), (523, 23318), (539, 23372), (551, 23441), (557, 23474), (559, 23480), (572, 23543), (573, 23546), (577, 23564), (582, 23585), (583, 23594),

Gene: Bizzy_37 Start: 32196, Stop: 33917, Start Num: 98

Candidate Starts for Bizzy_37:

(Start: 98 @32196 has 30 MA's), (155, 32319), (160, 32331), (188, 32397), (210, 32466), (218, 32502), (228, 32541), (281, 32727), (293, 32766), (316, 32826), (332, 32871), (349, 32931), (383, 33066), (386, 33072), (406, 33114), (410, 33129), (416, 33165), (424, 33186), (447, 33285), (467, 33369), (471, 33402), (476, 33447), (477, 33450), (484, 33486), (491, 33522), (493, 33534), (504, 33570), (515, 33606), (533, 33660),

Gene: Bjaner7_25 Start: 20498, Stop: 22021, Start Num: 169

Candidate Starts for Bjaner7_25:

(Start: 169 @20498 has 19 MA's), (207, 20570), (212, 20582), (221, 20609), (225, 20633), (266, 20753), (270, 20762), (286, 20828), (337, 20942), (349, 20984), (358, 21014), (364, 21044), (379, 21110), (389, 21134), (401, 21158), (409, 21176), (411, 21188), (414, 21206), (417, 21221), (419, 21227), (436, 21278), (441, 21305), (455, 21356), (481, 21524), (486, 21545), (502, 21623), (513, 21662), (521, 21683), (523, 21686), (526, 21698), (536, 21737), (560, 21884), (572, 21944), (573, 21947),

Gene: BlueNGold_103 Start: 62535, Stop: 64172, Start Num: 93

Candidate Starts for BlueNGold_103:

(Start: 64 @62475 has 12 MA's), (Start: 72 @62493 has 5 MA's), (Start: 93 @62535 has 1 MA's), (96, 62544), (Start: 133 @62610 has 3 MA's), (Start: 135 @62613 has 1 MA's), (154, 62634), (194, 62745), (209, 62787), (248, 62925), (255, 62949), (350, 63195), (376, 63312), (395, 63339), (400, 63345), (413, 63399), (423, 63438), (449, 63549), (453, 63564), (455, 63573), (486, 63744), (490, 63765), (513, 63858), (547, 63966), (583, 64143),

Gene: BobBob_35 Start: 32673, Stop: 34526, Start Num: 26

Candidate Starts for BobBob_35:

(Start: 26 @32673 has 23 MA's), (60, 32808), (65, 32817), (82, 32850), (90, 32874), (124, 32943), (138, 32973), (156, 33018), (221, 33210), (222, 33216), (230, 33237), (235, 33255), (238, 33267), (255, 33327), (295, 33393), (349, 33513), (358, 33546), (376, 33633), (391, 33663), (400, 33675), (412, 33720), (413, 33732), (417, 33750), (421, 33765), (428, 33789), (442, 33855), (449, 33882), (455, 33906), (476, 34029), (483, 34071), (503, 34155), (511, 34185), (523, 34212), (539, 34266),

(545, 34296), (557, 34368), (560, 34377),

Gene: BobsGarage_20 Start: 19228, Stop: 21024, Start Num: 51

Candidate Starts for BobsGarage_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371, 20146), (390, 20203), (394, 20209), (418, 20293), (420, 20302), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (505, 20695), (513, 20722), (520, 20740), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: Boopy_104 Start: 62505, Stop: 64184, Start Num: 72

Candidate Starts for Boopy_104:

(Start: 64 @62487 has 12 MA's), (Start: 72 @62505 has 5 MA's), (Start: 93 @62547 has 1 MA's), (96, 62556), (Start: 133 @62622 has 3 MA's), (Start: 135 @62625 has 1 MA's), (154, 62646), (194, 62757), (209, 62799), (248, 62937), (255, 62961), (350, 63207), (376, 63324), (395, 63351), (400, 63357), (413, 63411), (423, 63450), (449, 63561), (453, 63576), (455, 63585), (486, 63756), (490, 63777), (513, 63870), (547, 63978), (583, 64155),

Gene: Bosnia_26 Start: 22926, Stop: 24431, Start Num: 168

Candidate Starts for Bosnia_26:

(43, 22611), (Start: 81 @22719 has 1 MA's), (111, 22788), (113, 22791), (124, 22815), (125, 22821), (Start: 168 @22926 has 29 MA's), (195, 22995), (199, 23007), (235, 23118), (237, 23124), (238, 23130), (241, 23136), (268, 23223), (275, 23259), (276, 23265), (279, 23274), (376, 23568), (406, 23622), (407, 23625), (412, 23646), (422, 23691), (447, 23796), (467, 23880), (476, 23961), (477, 23964), (532, 24183), (543, 24231), (553, 24291), (565, 24324), (568, 24330), (581, 24402),

Gene: BoyNamedSue_27 Start: 22802, Stop: 24307, Start Num: 168

Candidate Starts for BoyNamedSue_27:

(Start: 81 @22595 has 1 MA's), (111, 22664), (113, 22667), (124, 22691), (125, 22697), (Start: 168 @22802 has 29 MA's), (195, 22871), (199, 22883), (235, 22994), (237, 23000), (238, 23006), (241, 23012), (268, 23099), (275, 23135), (276, 23141), (279, 23150), (311, 23234), (376, 23444), (406, 23498), (407, 23501), (412, 23522), (422, 23567), (447, 23672), (467, 23756), (476, 23837), (477, 23840), (501, 23963), (532, 24059), (543, 24107), (548, 24122), (553, 24167), (565, 24200), (568, 24206), (581, 24278),

Gene: Bradissa_28 Start: 22770, Stop: 24722, Start Num: 18

Candidate Starts for Bradissa_28:

(1, 22482), (3, 22539), (4, 22554), (6, 22590), (7, 22635), (8, 22638), (Start: 18 @22770 has 8 MA's), (23, 22785), (Start: 26 @22824 has 23 MA's), (Start: 28 @22827 has 17 MA's), (106, 23055), (122, 23082), (Start: 128 @23097 has 1 MA's), (221, 23331), (222, 23337), (226, 23349), (250, 23427), (255, 23448), (296, 23568), (317, 23610), (349, 23703), (351, 23715), (362, 23757), (377, 23829), (391, 23847), (400, 23859), (413, 23916), (421, 23949), (430, 23982), (449, 24066), (454, 24084), (484, 24258), (495, 24312), (551, 24534), (570, 24615), (572, 24636),

Gene: Brandonk123_39 Start: 33739, Stop: 35661, Start Num: 26

Candidate Starts for Brandonk123_39:

(Start: 26 @33739 has 23 MA's), (60, 33874), (65, 33883), (82, 33916), (90, 33940), (124, 34009), (138, 34039), (156, 34084), (221, 34276), (222, 34282), (230, 34303), (235, 34321), (238, 34333), (255, 34393), (275, 34447), (321, 34561), (349, 34648), (362, 34702), (373, 34756), (376, 34768), (391, 34798), (400, 34810), (412, 34855), (413, 34867), (417, 34885), (425, 34912), (442, 34990), (449, 35017), (455, 35041), (476, 35164), (483, 35206), (503, 35290), (511, 35320), (523, 35347), (539, 35401), (545, 35431), (557, 35503), (560, 35512),

Gene: Breezona_20 Start: 19225, Stop: 21024, Start Num: 48

Candidate Starts for Breezona_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371, 20146), (390, 20203), (394, 20209), (418, 20293), (420, 20302), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (505, 20695), (513, 20722), (520, 20740), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: BritBrat_28 Start: 22623, Stop: 24575, Start Num: 18

Candidate Starts for BritBrat_28:

(1, 22335), (3, 22392), (4, 22407), (6, 22443), (7, 22488), (8, 22491), (Start: 18 @22623 has 8 MA's), (23, 22638), (Start: 26 @22677 has 23 MA's), (Start: 28 @22680 has 17 MA's), (106, 22908), (122, 22935), (Start: 128 @22950 has 1 MA's), (221, 23184), (222, 23190), (226, 23202), (250, 23280), (255, 23301), (296, 23421), (317, 23463), (349, 23556), (351, 23568), (362, 23610), (391, 23700), (400, 23712), (413, 23769), (421, 23802), (430, 23835), (444, 23895), (449, 23919), (454, 23937), (484, 24111), (485, 24117), (495, 24165), (551, 24387), (570, 24468), (572, 24489),

Gene: Budski_29 Start: 22226, Stop: 24061, Start Num: 31

Candidate Starts for Budski_29:

(Start: 31 @22226 has 22 MA's), (Start: 79 @22388 has 1 MA's), (91, 22418), (116, 22472), (124, 22487), (Start: 128 @22499 has 1 MA's), (129, 22502), (140, 22517), (142, 22520), (144, 22523), (182, 22613), (187, 22622), (189, 22625), (216, 22712), (221, 22733), (222, 22739), (230, 22760), (231, 22769), (238, 22790), (241, 22796), (285, 22898), (286, 22901), (302, 22931), (306, 22943), (321, 22967), (349, 23042), (351, 23054), (362, 23096), (368, 23129), (376, 23162), (379, 23168), (391, 23192), (400, 23204), (413, 23261), (417, 23279), (449, 23411), (455, 23435), (458, 23453), (484, 23606), (487, 23621), (489, 23633), (490, 23636), (491, 23642), (503, 23687), (508, 23705), (511, 23717), (513, 23723), (519, 23735), (523, 23744), (539, 23798), (551, 23867), (557, 23900), (559, 23906), (572, 23969), (573, 23972), (577, 23990), (582, 24011), (583, 24020),

Gene: Bunnybear_25 Start: 23020, Stop: 24708, Start Num: 88

Candidate Starts for Bunnybear_25:

(5, 22567), (20, 22780), (35, 22852), (37, 22855), (Start: 88 @23020 has 1 MA's), (121, 23089), (126, 23101), (195, 23254), (197, 23257), (204, 23281), (210, 23293), (216, 23317), (220, 23335), (221, 23338), (255, 23455), (261, 23467), (298, 23569), (312, 23593), (339, 23665), (349, 23695), (350, 23698), (351, 23707), (362, 23755), (391, 23845), (400, 23857), (410, 23893), (413, 23914), (417, 23932), (430, 23980), (449, 24064), (484, 24256), (485, 24262), (487, 24271), (511, 24382), (523, 24409), (536, 24457), (538, 24460), (543, 24487), (551, 24532),

Gene: Caitlin_27 Start: 21508, Stop: 23229, Start Num: 64

Candidate Starts for Caitlin_27:

(Start: 64 @21508 has 12 MA's), (136, 21652), (145, 21667), (187, 21766), (221, 21856), (230, 21892), (236, 21913), (256, 21985), (266, 22009), (280, 22063), (327, 22165), (356, 22261), (366, 22315), (375, 22363), (415, 22474), (427, 22510), (453, 22621), (457, 22636), (491, 22840), (492, 22849), (515, 22930), (542, 23026), (567, 23125), (585, 23212),

Gene: Camerico_31 Start: 38003, Stop: 39535, Start Num: 163

Candidate Starts for Camerico_31:

(Start: 163 @38003 has 1 MA's), (222, 38162), (231, 38186), (264, 38288), (286, 38372), (335, 38495), (338, 38510), (339, 38513), (358, 38579), (388, 38681), (392, 38690), (397, 38696), (419, 38777), (453, 38921), (469, 38999), (487, 39122), (511, 39212), (537, 39299), (570, 39440), (571, 39455),

Gene: ChadMasterC_37 Start: 33999, Stop: 35720, Start Num: 98

Candidate Starts for ChadMasterC_37:

(Start: 98 @33999 has 30 MA's), (160, 34134), (162, 34143), (176, 34176), (188, 34200), (210, 34269), (228, 34344), (281, 34530), (293, 34569), (297, 34578), (302, 34593), (326, 34650), (332, 34674), (351, 34746), (370, 34833), (383, 34869), (386, 34875), (406, 34917), (410, 34932), (412, 34941), (447, 35088), (467, 35172), (471, 35205), (477, 35253), (490, 35319), (491, 35325), (493, 35337), (503, 35367), (504, 35373), (515, 35409), (519, 35418), (533, 35463),

Gene: Charming_38 Start: 33240, Stop: 35162, Start Num: 26

Candidate Starts for Charming_38:

(Start: 26 @33240 has 23 MA's), (60, 33375), (82, 33417), (90, 33441), (124, 33510), (138, 33540), (156, 33585), (221, 33777), (222, 33783), (230, 33804), (235, 33822), (238, 33834), (255, 33894), (275, 33948), (321, 34062), (349, 34149), (362, 34203), (376, 34269), (391, 34299), (400, 34311), (412, 34356), (413, 34368), (417, 34386), (425, 34413), (442, 34491), (449, 34518), (455, 34542), (476, 34665), (483, 34707), (503, 34791), (511, 34821), (523, 34848), (539, 34902), (545, 34932), (557, 35004), (560, 35013),

Gene: CherryCola_36 Start: 29154, Stop: 31076, Start Num: 28

Candidate Starts for CherryCola_36:

(Start: 28 @29154 has 17 MA's), (57, 29277), (65, 29298), (86, 29346), (138, 29454), (149, 29475), (182, 29556), (195, 29592), (197, 29595), (220, 29673), (221, 29676), (222, 29682), (230, 29703), (238, 29733), (241, 29739), (283, 29874), (315, 29961), (320, 29970), (323, 29976), (326, 29982), (349, 30057), (358, 30090), (362, 30111), (379, 30183), (391, 30207), (400, 30219), (413, 30276), (449, 30426), (455, 30450), (484, 30618), (487, 30633), (511, 30729), (543, 30840), (549, 30876),

Gene: Clap_25 Start: 20505, Stop: 22028, Start Num: 169

Candidate Starts for Clap_25:

(Start: 169 @20505 has 19 MA's), (207, 20577), (212, 20589), (221, 20616), (222, 20622), (225, 20640), (266, 20760), (270, 20769), (286, 20835), (337, 20949), (349, 20991), (358, 21021), (364, 21051), (376, 21111), (379, 21117), (389, 21141), (401, 21165), (409, 21183), (411, 21195), (414, 21213), (417, 21228), (419, 21234), (436, 21285), (441, 21312), (455, 21363), (481, 21531), (513, 21669), (521, 21690), (523, 21693), (526, 21705), (536, 21744), (560, 21891), (572, 21951), (573, 21954),

Gene: Claus_20 Start: 19209, Stop: 21005, Start Num: 51

Candidate Starts for Claus_20:

(Start: 51 @19209 has 26 MA's), (100, 19329), (111, 19350), (117, 19362), (127, 19386), (141, 19413), (166, 19482), (170, 19491), (187, 19524), (192, 19536), (201, 19566), (211, 19593), (243, 19710), (254, 19758), (270, 19794), (280, 19839), (299, 19890), (340, 19995), (345, 20013), (355, 20046), (356, 20049), (363, 20088), (371, 20127), (392, 20187), (394, 20190), (418, 20274), (456, 20421), (471, 20499), (484, 20592), (487, 20607), (503, 20667), (505, 20676), (530, 20751), (534, 20766), (551, 20850), (552, 20853), (560, 20877), (566, 20901), (570, 20916), (584, 20988),

Gene: Crater_27 Start: 21679, Stop: 23514, Start Num: 31

Candidate Starts for Crater_27:

(Start: 31 @21679 has 22 MA's), (Start: 79 @21841 has 1 MA's), (91, 21871), (116, 21925), (124, 21940), (Start: 128 @21952 has 1 MA's), (129, 21955), (140, 21970), (142, 21973), (144, 21976), (182, 22066), (187, 22075), (189, 22078), (216, 22165), (221, 22186), (222, 22192), (230, 22213), (231, 22222), (238, 22243), (241, 22249), (285, 22351), (286, 22354), (302, 22384), (306, 22396), (321, 22420), (349, 22495), (351, 22507), (362, 22549), (368, 22582), (376, 22615), (379, 22621), (391, 22645), (400, 22657), (413, 22714), (417, 22732), (449, 22864), (455, 22888), (458, 22906), (484, 23059), (487, 23074), (490, 23089), (491, 23095), (503, 23140), (508, 23158), (511, 23170), (513, 23176), (519, 23188), (523, 23197), (539, 23251), (543, 23275), (551, 23320), (557, 23353), (559,

23359), (572, 23422), (573, 23425), (577, 23443), (582, 23464), (583, 23473),

Gene: Crossroads_20 Start: 19228, Stop: 21024, Start Num: 51

Candidate Starts for Crossroads_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371, 20146), (390, 20203), (392, 20206), (394, 20209), (418, 20293), (420, 20302), (428, 20329), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (505, 20695), (513, 20722), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: Cynthia_25 Start: 20505, Stop: 22028, Start Num: 169

Candidate Starts for Cynthia_25:

(Start: 169 @20505 has 19 MA's), (207, 20577), (212, 20589), (221, 20616), (222, 20622), (225, 20640), (266, 20760), (270, 20769), (286, 20835), (337, 20949), (349, 20991), (358, 21021), (364, 21051), (376, 21111), (379, 21117), (389, 21141), (401, 21165), (409, 21183), (411, 21195), (414, 21213), (417, 21228), (419, 21234), (436, 21285), (441, 21312), (455, 21363), (481, 21531), (513, 21669), (521, 21690), (523, 21693), (526, 21705), (536, 21744), (560, 21891), (572, 21951), (573, 21954),

Gene: DHan_20 Start: 19145, Stop: 20941, Start Num: 51

Candidate Starts for DHan_20:

(Start: 51 @19145 has 26 MA's), (100, 19265), (127, 19322), (141, 19349), (162, 19406), (166, 19418), (170, 19427), (192, 19472), (201, 19502), (211, 19529), (243, 19646), (254, 19694), (270, 19730), (280, 19775), (299, 19826), (340, 19931), (345, 19949), (355, 19982), (356, 19985), (363, 20024), (371, 20063), (392, 20123), (394, 20126), (418, 20210), (456, 20357), (471, 20435), (484, 20528), (487, 20543), (503, 20603), (505, 20612), (513, 20639), (530, 20687), (534, 20702), (551, 20786), (560, 20813), (566, 20837), (570, 20852), (584, 20924),

Gene: DanBing_19 Start: 19049, Stop: 20845, Start Num: 51

Candidate Starts for DanBing_19:

(Start: 51 @19049 has 26 MA's), (100, 19169), (111, 19190), (117, 19202), (127, 19226), (141, 19253), (166, 19322), (170, 19331), (187, 19364), (192, 19376), (201, 19406), (211, 19433), (243, 19550), (254, 19598), (270, 19634), (280, 19679), (299, 19730), (340, 19835), (345, 19853), (355, 19886), (356, 19889), (363, 19928), (371, 19967), (392, 20027), (394, 20030), (418, 20114), (456, 20261), (471, 20339), (484, 20432), (487, 20447), (503, 20507), (505, 20516), (513, 20543), (530, 20591), (534, 20606), (551, 20690), (552, 20693), (560, 20717), (566, 20741), (570, 20756), (584, 20828),

Gene: Danforth_27 Start: 21490, Stop: 23211, Start Num: 64

Candidate Starts for Danforth_27:

(Start: 64 @21490 has 12 MA's), (136, 21634), (187, 21748), (221, 21838), (230, 21874), (236, 21895), (256, 21967), (266, 21991), (280, 22045), (327, 22147), (356, 22243), (366, 22297), (375, 22345), (421, 22474), (427, 22492), (457, 22618), (491, 22822), (492, 22831), (515, 22912), (567, 23107),

Gene: Denise_23 Start: 19509, Stop: 21110, Start Num: 128

Candidate Starts for Denise_23:

(62, 19368), (63, 19371), (114, 19479), (Start: 128 @19509 has 1 MA's), (149, 19542), (162, 19581), (182, 19620), (221, 19728), (222, 19734), (242, 19791), (250, 19824), (255, 19845), (261, 19857), (273, 19893), (312, 19983), (321, 19998), (339, 20055), (349, 20085), (351, 20097), (362, 20145), (391, 20235), (400, 20247), (410, 20283), (413, 20304), (430, 20370), (449, 20454), (484, 20646), (485, 20652), (511, 20772), (523, 20799), (543, 20877), (551, 20922),

Gene: Derg_32 Start: 31792, Stop: 33513, Start Num: 98

Candidate Starts for Derg_32:

(Start: 98 @31792 has 30 MA's), (155, 31915), (160, 31927), (188, 31993), (210, 32062), (218, 32098), (281, 32323), (293, 32362), (316, 32422), (332, 32467), (349, 32527), (383, 32662), (386, 32668), (406, 32710), (410, 32725), (416, 32761), (424, 32782), (447, 32881), (467, 32965), (471, 32998), (476, 33043), (477, 33046), (484, 33082), (491, 33118), (493, 33130), (504, 33166), (515, 33202), (533, 33256),

Gene: Dixon_28 Start: 21509, Stop: 23230, Start Num: 64

Candidate Starts for Dixon_28:

(Start: 64 @21509 has 12 MA's), (136, 21653), (145, 21668), (187, 21767), (230, 21893), (236, 21914), (256, 21986), (266, 22010), (280, 22064), (327, 22166), (356, 22262), (366, 22316), (375, 22364), (415, 22475), (427, 22511), (453, 22622), (457, 22637), (491, 22841), (492, 22850), (515, 22931), (542, 23027), (567, 23126),

Gene: DonkeyMan_25 Start: 19656, Stop: 21356, Start Num: 78

Candidate Starts for DonkeyMan_25:

(Start: 78 @19656 has 1 MA's), (129, 19755), (173, 19851), (182, 19866), (221, 19986), (222, 19992), (255, 20103), (258, 20109), (317, 20262), (349, 20355), (350, 20358), (351, 20367), (358, 20388), (362, 20409), (376, 20478), (377, 20481), (391, 20499), (400, 20511), (410, 20547), (413, 20568), (417, 20586), (430, 20634), (445, 20703), (449, 20718), (484, 20910), (485, 20916), (487, 20925), (511, 21036), (523, 21063), (536, 21111), (543, 21141), (551, 21186),

Gene: DrSeegs_20 Start: 19228, Stop: 21024, Start Num: 51

Candidate Starts for DrSeegs_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371, 20146), (390, 20203), (394, 20209), (418, 20293), (420, 20302), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (505, 20695), (513, 20722), (520, 20740), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: EMSquaredA_28 Start: 22623, Stop: 24575, Start Num: 18

Candidate Starts for EMSquaredA_28:

(1, 22335), (3, 22392), (4, 22407), (6, 22443), (7, 22488), (8, 22491), (Start: 18 @22623 has 8 MA's), (23, 22638), (Start: 26 @22677 has 23 MA's), (Start: 28 @22680 has 17 MA's), (106, 22908), (122, 22935), (Start: 128 @22950 has 1 MA's), (221, 23184), (222, 23190), (226, 23202), (250, 23280), (255, 23301), (296, 23421), (317, 23463), (349, 23556), (351, 23568), (362, 23610), (391, 23700), (400, 23712), (413, 23769), (421, 23802), (430, 23835), (444, 23895), (449, 23919), (454, 23937), (484, 24111), (485, 24117), (495, 24165), (551, 24387), (570, 24468), (572, 24489),

Gene: Ebert_25 Start: 20505, Stop: 22028, Start Num: 169

Candidate Starts for Ebert_25:

(Start: 169 @20505 has 19 MA's), (207, 20577), (212, 20589), (221, 20616), (222, 20622), (225, 20640), (266, 20760), (270, 20769), (286, 20835), (337, 20949), (349, 20991), (358, 21021), (364, 21051), (376, 21111), (379, 21117), (389, 21141), (401, 21165), (409, 21183), (411, 21195), (414, 21213), (417, 21228), (419, 21234), (436, 21285), (441, 21312), (455, 21363), (481, 21531), (513, 21669), (521, 21690), (523, 21693), (526, 21705), (536, 21744), (560, 21891), (572, 21951), (573, 21954),

Gene: Ecliptus_32 Start: 23700, Stop: 25484, Start Num: 31

Candidate Starts for Ecliptus_32:

(Start: 31 @23700 has 22 MA's), (33, 23715), (44, 23742), (52, 23772), (82, 23844), (85, 23856), (119, 23919), (124, 23931), (150, 23973), (167, 24012), (171, 24021), (204, 24099), (221, 24156), (222,

24162), (230, 24183), (231, 24192), (238, 24213), (241, 24219), (285, 24321), (286, 24324), (302, 24354), (306, 24366), (321, 24390), (349, 24465), (351, 24477), (362, 24519), (368, 24552), (376, 24585), (379, 24591), (391, 24615), (400, 24627), (413, 24684), (417, 24702), (449, 24834), (455, 24858), (458, 24876), (484, 25029), (487, 25044), (490, 25059), (491, 25065), (503, 25110), (508, 25128), (511, 25140), (513, 25146), (519, 25158), (523, 25167), (539, 25221), (551, 25290), (557, 25323), (559, 25329), (572, 25392), (573, 25395), (577, 25413), (582, 25434), (583, 25443),

Gene: EdnaMode_24 Start: 19408, Stop: 20961, Start Num: 133

Candidate Starts for EdnaMode_24:

(Start: 133 @19408 has 3 MA's), (166, 19477), (174, 19492), (194, 19534), (195, 19540), (221, 19624), (222, 19630), (230, 19651), (235, 19669), (239, 19681), (242, 19687), (304, 19843), (330, 19885), (358, 19978), (362, 19999), (376, 20065), (391, 20095), (400, 20107), (413, 20164), (449, 20314), (455, 20338), (484, 20506), (503, 20605), (508, 20623), (511, 20635), (560, 20812), (567, 20839), (574, 20878),

Gene: EnalisNailo_28 Start: 22772, Stop: 24724, Start Num: 18

Candidate Starts for EnalisNailo_28:

(1, 22484), (3, 22541), (4, 22556), (6, 22592), (7, 22637), (8, 22640), (Start: 18 @22772 has 8 MA's), (23, 22787), (Start: 26 @22826 has 23 MA's), (Start: 28 @22829 has 17 MA's), (106, 23057), (122, 23084), (Start: 128 @23099 has 1 MA's), (221, 23333), (222, 23339), (226, 23351), (250, 23429), (255, 23450), (296, 23570), (317, 23612), (349, 23705), (351, 23717), (362, 23759), (391, 23849), (400, 23861), (413, 23918), (421, 23951), (430, 23984), (444, 24044), (449, 24068), (454, 24086), (484, 24260), (485, 24266), (495, 24314), (551, 24536), (570, 24617), (572, 24638),

Gene: Eudoria_28 Start: 22923, Stop: 24428, Start Num: 168

Candidate Starts for Eudoria_28:

(Start: 168 @22923 has 29 MA's), (195, 22992), (199, 23004), (235, 23115), (238, 23127), (241, 23133), (268, 23220), (275, 23256), (276, 23262), (279, 23271), (376, 23565), (406, 23619), (407, 23622), (412, 23643), (422, 23688), (447, 23793), (467, 23877), (476, 23958), (477, 23961), (501, 24084), (532, 24180), (543, 24228), (553, 24288), (565, 24321), (568, 24327), (581, 24399),

Gene: Evamon_33 Start: 28220, Stop: 30142, Start Num: 28

Candidate Starts for Evamon_33:

(Start: 28 @28220 has 17 MA's), (57, 28343), (65, 28364), (86, 28412), (138, 28520), (149, 28541), (182, 28622), (195, 28658), (197, 28661), (220, 28739), (221, 28742), (222, 28748), (230, 28769), (238, 28799), (241, 28805), (283, 28940), (315, 29027), (320, 29036), (323, 29042), (326, 29048), (358, 29156), (362, 29177), (379, 29249), (391, 29273), (400, 29285), (413, 29342), (449, 29492), (455, 29516), (484, 29684), (487, 29699), (511, 29795), (543, 29906), (549, 29942),

Gene: Eviarto_26 Start: 22926, Stop: 24431, Start Num: 168

Candidate Starts for Eviarto_26:

(43, 22611), (Start: 81 @22719 has 1 MA's), (111, 22788), (113, 22791), (124, 22815), (125, 22821), (Start: 168 @22926 has 29 MA's), (195, 22995), (199, 23007), (235, 23118), (237, 23124), (238, 23130), (241, 23136), (268, 23223), (275, 23259), (276, 23265), (279, 23274), (376, 23568), (406, 23622), (407, 23625), (412, 23646), (422, 23691), (447, 23796), (467, 23880), (476, 23961), (477, 23964), (532, 24183), (543, 24231), (553, 24291), (565, 24324), (568, 24330), (581, 24402),

Gene: Expelliarmus_27 Start: 21476, Stop: 23197, Start Num: 64

Candidate Starts for Expelliarmus_27:

(Start: 64 @21476 has 12 MA's), (136, 21620), (145, 21635), (187, 21734), (221, 21824), (230, 21860), (256, 21953), (266, 21977), (280, 22031), (327, 22133), (356, 22229), (366, 22283), (375, 22331), (421, 22460), (427, 22478), (457, 22604), (491, 22808), (492, 22817), (515, 22898), (542, 22994), (567, 23093), (585, 23180),

Gene: Faith1_20 Start: 19225, Stop: 21024, Start Num: 48

Candidate Starts for Faith1_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371, 20146), (390, 20203), (394, 20209), (418, 20293), (420, 20302), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (505, 20695), (513, 20722), (520, 20740), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: Faith5x5_24 Start: 19344, Stop: 20945, Start Num: 134

Candidate Starts for Faith5x5_24:

(52, 19161), (66, 19206), (67, 19209), (132, 19341), (Start: 134 @19344 has 5 MA's), (166, 19416), (174, 19431), (178, 19437), (194, 19473), (195, 19479), (204, 19506), (211, 19521), (220, 19560), (221, 19563), (222, 19569), (230, 19590), (235, 19608), (242, 19626), (250, 19659), (253, 19677), (255, 19680), (261, 19692), (329, 19878), (349, 19944), (350, 19947), (358, 19977), (373, 20055), (385, 20076), (391, 20088), (400, 20100), (413, 20157), (423, 20196), (449, 20307), (470, 20403), (484, 20499), (498, 20568), (511, 20610), (523, 20637), (539, 20691), (543, 20715), (549, 20751), (567, 20823), (573, 20859),

Gene: FatCactus_29 Start: 21131, Stop: 22840, Start Num: 64

Candidate Starts for FatCactus_29:

(Start: 64 @21131 has 12 MA's), (136, 21278), (145, 21293), (155, 21320), (175, 21368), (187, 21392), (199, 21425), (319, 21779), (331, 21806), (334, 21815), (398, 22022), (412, 22070), (420, 22109), (428, 22136), (456, 22244), (457, 22247), (459, 22262), (491, 22448), (506, 22508), (514, 22535), (534, 22595),

Gene: Finemlucis_20 Start: 19236, Stop: 21032, Start Num: 51

Candidate Starts for Finemlucis_20:

(Start: 48 @19233 has 5 MA's), (Start: 51 @19236 has 26 MA's), (117, 19389), (127, 19413), (166, 19509), (170, 19518), (192, 19563), (201, 19593), (211, 19620), (234, 19713), (243, 19737), (270, 19821), (280, 19866), (340, 20022), (345, 20040), (350, 20055), (355, 20073), (356, 20076), (371, 20154), (390, 20211), (392, 20214), (394, 20217), (418, 20301), (420, 20310), (428, 20337), (456, 20448), (457, 20451), (484, 20619), (503, 20694), (505, 20703), (513, 20730), (525, 20763), (530, 20778), (534, 20793), (536, 20799), (551, 20877), (552, 20880), (566, 20928), (584, 21015),

Gene: Finkle_23 Start: 19627, Stop: 21318, Start Num: 101

Candidate Starts for Finkle_23:

(Start: 101 @19627 has 1 MA's), (152, 19726), (155, 19744), (158, 19750), (220, 19909), (224, 19930), (236, 19963), (244, 19996), (260, 20038), (264, 20044), (272, 20080), (274, 20092), (288, 20131), (380, 20422), (384, 20431), (398, 20455), (405, 20473), (406, 20476), (414, 20512), (417, 20527), (419, 20533), (443, 20632), (460, 20707), (470, 20752), (475, 20818), (479, 20842), (484, 20866), (485, 20872), (494, 20917), (551, 21133),

Gene: Fireball_34 Start: 28343, Stop: 30265, Start Num: 28

Candidate Starts for Fireball_34:

(Start: 28 @28343 has 17 MA's), (57, 28466), (65, 28487), (86, 28535), (138, 28643), (149, 28664), (182, 28745), (195, 28781), (197, 28784), (220, 28862), (221, 28865), (222, 28871), (230, 28892), (238, 28922), (241, 28928), (283, 29063), (315, 29150), (320, 29159), (323, 29165), (326, 29171), (349, 29246), (358, 29279), (362, 29300), (379, 29372), (391, 29396), (400, 29408), (413, 29465), (449, 29615), (455, 29639), (484, 29807), (487, 29822), (511, 29918), (543, 30029), (549, 30065),

Gene: Fitzgerald_35 Start: 33217, Stop: 34938, Start Num: 98

Candidate Starts for Fitzgerald_35:

(Start: 98 @33217 has 30 MA's), (160, 33352), (162, 33361), (176, 33394), (188, 33418), (210, 33487), (281, 33748), (293, 33787), (297, 33796), (302, 33811), (326, 33868), (332, 33892), (351, 33964), (370, 34051), (383, 34087), (386, 34093), (406, 34135), (410, 34150), (412, 34159), (447, 34306), (467, 34390), (471, 34423), (477, 34471), (490, 34537), (491, 34543), (493, 34555), (503, 34585), (504, 34591), (515, 34627), (519, 34636), (533, 34681),

Gene: Flatwoods_37 Start: 32153, Stop: 33874, Start Num: 98

Candidate Starts for Flatwoods_37:

(Start: 98 @32153 has 30 MA's), (155, 32276), (160, 32288), (188, 32354), (210, 32423), (218, 32459), (228, 32498), (281, 32684), (293, 32723), (316, 32783), (332, 32828), (349, 32888), (383, 33023), (386, 33029), (406, 33071), (410, 33086), (416, 33122), (424, 33143), (447, 33242), (467, 33326), (471, 33359), (476, 33404), (477, 33407), (484, 33443), (491, 33479), (493, 33491), (504, 33527), (515, 33563), (533, 33617),

Gene: Floral_28 Start: 22623, Stop: 24575, Start Num: 18

Candidate Starts for Floral_28:

(1, 22335), (3, 22392), (4, 22407), (6, 22443), (7, 22488), (8, 22491), (Start: 18 @22623 has 8 MA's), (23, 22638), (Start: 26 @22677 has 23 MA's), (Start: 28 @22680 has 17 MA's), (106, 22908), (122, 22935), (Start: 128 @22950 has 1 MA's), (221, 23184), (222, 23190), (226, 23202), (250, 23280), (255, 23301), (296, 23421), (317, 23463), (349, 23556), (351, 23568), (362, 23610), (391, 23700), (400, 23712), (413, 23769), (421, 23802), (430, 23835), (444, 23895), (449, 23919), (454, 23937), (484, 24111), (485, 24117), (495, 24165), (551, 24387), (570, 24468), (572, 24489),

Gene: Forza_104 Start: 62421, Stop: 64100, Start Num: 72

Candidate Starts for Forza_104:

(Start: 64 @62403 has 12 MA's), (Start: 72 @62421 has 5 MA's), (Start: 93 @62463 has 1 MA's), (96, 62472), (Start: 133 @62538 has 3 MA's), (Start: 135 @62541 has 1 MA's), (154, 62562), (194, 62673), (209, 62715), (248, 62853), (255, 62877), (350, 63123), (376, 63240), (395, 63267), (400, 63273), (413, 63327), (423, 63366), (449, 63477), (453, 63492), (455, 63501), (486, 63672), (490, 63693), (513, 63786), (547, 63894), (583, 64071),

Gene: Fosterous_36 Start: 33665, Stop: 35518, Start Num: 26

Candidate Starts for Fosterous_36:

(Start: 26 @33665 has 23 MA's), (60, 33800), (65, 33809), (82, 33842), (90, 33866), (124, 33935), (156, 34010), (221, 34202), (222, 34208), (230, 34229), (235, 34247), (238, 34259), (255, 34319), (307, 34400), (349, 34505), (350, 34508), (358, 34538), (373, 34613), (376, 34625), (391, 34655), (400, 34667), (412, 34712), (413, 34724), (417, 34742), (425, 34769), (442, 34847), (449, 34874), (455, 34898), (476, 35021), (483, 35063), (503, 35147), (511, 35177), (523, 35204), (539, 35258), (545, 35288), (557, 35360), (560, 35369),

Gene: Frickyeah_28 Start: 21884, Stop: 23719, Start Num: 31

Candidate Starts for Frickyeah_28:

(Start: 31 @21884 has 22 MA's), (Start: 79 @22046 has 1 MA's), (91, 22076), (116, 22130), (124, 22145), (Start: 128 @22157 has 1 MA's), (129, 22160), (140, 22175), (142, 22178), (144, 22181), (182, 22271), (187, 22280), (189, 22283), (216, 22370), (221, 22391), (222, 22397), (230, 22418), (231, 22427), (238, 22448), (241, 22454), (285, 22556), (286, 22559), (302, 22589), (306, 22601), (321, 22625), (325, 22634), (349, 22700), (351, 22712), (362, 22754), (368, 22787), (376, 22820), (379, 22826), (391, 22850), (400, 22862), (413, 22919), (417, 22937), (449, 23069), (455, 23093), (458, 23111), (484, 23264), (487, 23279), (490, 23294), (491, 23300), (503, 23345), (508, 23363), (511, 23375), (513, 23381), (519, 23393), (523, 23402), (539, 23456), (551, 23525), (557, 23558), (559, 23564), (572, 23627), (573, 23630), (577, 23648), (582, 23669), (583, 23678),

Gene: FroggyToad_25 Start: 20570, Stop: 22192, Start Num: 134

Candidate Starts for FroggyToad_25:

(Start: 134 @20570 has 5 MA's), (174, 20657), (194, 20699), (195, 20705), (204, 20732), (221, 20789), (230, 20816), (233, 20831), (250, 20885), (261, 20918), (317, 21077), (329, 21104), (350, 21173), (358, 21203), (385, 21302), (391, 21314), (400, 21326), (413, 21383), (421, 21416), (423, 21422), (440, 21497), (449, 21533), (476, 21683), (484, 21728), (572, 22097),

Gene: FuegoCuervo_39 Start: 31604, Stop: 33325, Start Num: 98

Candidate Starts for FuegoCuervo_39:

(Start: 98 @31604 has 30 MA's), (160, 31739), (162, 31748), (176, 31781), (188, 31805), (210, 31874), (217, 31904), (281, 32135), (293, 32174), (297, 32183), (302, 32198), (326, 32255), (332, 32279), (351, 32351), (370, 32438), (383, 32474), (386, 32480), (403, 32516), (406, 32522), (410, 32537), (446, 32690), (447, 32693), (467, 32777), (471, 32810), (477, 32858), (490, 32924), (491, 32930), (493, 32942), (503, 32972), (504, 32978), (515, 33014), (519, 33023), (533, 33068), (560, 33197),

Gene: GAL1_28 Start: 22722, Stop: 24629, Start Num: 21

Candidate Starts for GAL1_28:

(21, 22722), (Start: 26 @22764 has 23 MA's), (50, 22866), (57, 22887), (65, 22908), (82, 22941), (106, 22995), (117, 23013), (121, 23022), (123, 23025), (126, 23034), (144, 23061), (151, 23073), (173, 23136), (191, 23169), (197, 23190), (204, 23214), (210, 23226), (216, 23250), (250, 23367), (255, 23388), (261, 23400), (312, 23526), (329, 23562), (349, 23628), (350, 23631), (351, 23640), (362, 23682), (391, 23772), (400, 23784), (410, 23820), (413, 23841), (430, 23907), (449, 23991), (484, 24183), (485, 24189), (487, 24198), (551, 24459),

Gene: Gabriela_20 Start: 19228, Stop: 21024, Start Num: 51

Candidate Starts for Gabriela_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371, 20146), (390, 20203), (394, 20209), (418, 20293), (420, 20302), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (505, 20695), (513, 20722), (520, 20740), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: Gaea_36 Start: 31801, Stop: 33522, Start Num: 98

Candidate Starts for Gaea_36:

(Start: 98 @31801 has 30 MA's), (155, 31924), (160, 31936), (188, 32002), (210, 32071), (218, 32107), (281, 32332), (293, 32371), (316, 32431), (332, 32476), (349, 32536), (383, 32671), (386, 32677), (406, 32719), (410, 32734), (416, 32770), (424, 32791), (447, 32890), (467, 32974), (471, 33007), (477, 33055), (484, 33091), (491, 33127), (493, 33139), (497, 33154), (504, 33175), (533, 33265),

Gene: Galadriel_38 Start: 34154, Stop: 36079, Start Num: 26

Candidate Starts for Galadriel_38:

(Start: 26 @34154 has 23 MA's), (60, 34289), (65, 34298), (82, 34331), (90, 34355), (124, 34424), (156, 34499), (221, 34691), (222, 34697), (230, 34718), (235, 34736), (238, 34748), (255, 34808), (275, 34862), (321, 34979), (349, 35066), (362, 35120), (373, 35174), (376, 35186), (391, 35216), (400, 35228), (412, 35273), (413, 35285), (417, 35303), (425, 35330), (442, 35408), (449, 35435), (455, 35459), (476, 35582), (483, 35624), (503, 35708), (511, 35738), (523, 35765), (539, 35819), (545, 35849), (557, 35921), (560, 35930),

Gene: Gardann_20 Start: 19233, Stop: 21029, Start Num: 51

Candidate Starts for Gardann_20:

(Start: 48 @19230 has 5 MA's), (Start: 51 @19233 has 26 MA's), (117, 19386), (127, 19410), (166, 19506), (170, 19515), (191, 19557), (192, 19560), (201, 19590), (211, 19617), (234, 19710), (243,

19734), (270, 19818), (280, 19863), (291, 19899), (340, 20019), (345, 20037), (350, 20052), (355, 20070), (356, 20073), (371, 20151), (390, 20208), (392, 20211), (394, 20214), (418, 20298), (420, 20307), (428, 20334), (456, 20445), (457, 20448), (484, 20616), (503, 20691), (505, 20700), (513, 20727), (525, 20760), (530, 20775), (534, 20790), (536, 20796), (551, 20874), (552, 20877), (566, 20925), (584, 21012),

Gene: GemG_25 Start: 20505, Stop: 22028, Start Num: 169

Candidate Starts for GemG_25:

(Start: 169 @20505 has 19 MA's), (207, 20577), (212, 20589), (221, 20616), (222, 20622), (225, 20640), (266, 20760), (270, 20769), (286, 20835), (337, 20949), (349, 20991), (358, 21021), (364, 21051), (376, 21111), (379, 21117), (389, 21141), (401, 21165), (409, 21183), (411, 21195), (414, 21213), (417, 21228), (419, 21234), (436, 21285), (441, 21312), (455, 21363), (481, 21531), (513, 21669), (521, 21690), (523, 21693), (526, 21705), (536, 21744), (560, 21891), (572, 21951), (573, 21954),

Gene: Geodirt_35 Start: 33142, Stop: 34863, Start Num: 98

Candidate Starts for Geodirt_35:

(Start: 98 @33142 has 30 MA's), (160, 33277), (162, 33286), (176, 33319), (188, 33343), (210, 33412), (228, 33487), (281, 33673), (293, 33712), (297, 33721), (326, 33793), (332, 33817), (351, 33889), (370, 33976), (383, 34012), (386, 34018), (406, 34060), (410, 34075), (412, 34084), (447, 34231), (467, 34315), (471, 34348), (477, 34396), (490, 34462), (491, 34468), (493, 34480), (503, 34510), (504, 34516), (515, 34552), (519, 34561), (533, 34606),

Gene: Getalong_30 Start: 22921, Stop: 24756, Start Num: 31

Candidate Starts for Getalong_30:

(Start: 31 @22921 has 22 MA's), (Start: 79 @23083 has 1 MA's), (91, 23113), (116, 23167), (124, 23182), (Start: 128 @23194 has 1 MA's), (129, 23197), (140, 23212), (142, 23215), (144, 23218), (182, 23308), (187, 23317), (189, 23320), (216, 23407), (221, 23428), (222, 23434), (230, 23455), (231, 23464), (238, 23485), (241, 23491), (285, 23593), (286, 23596), (302, 23626), (306, 23638), (321, 23662), (349, 23737), (351, 23749), (362, 23791), (368, 23824), (376, 23857), (379, 23863), (391, 23887), (400, 23899), (413, 23956), (417, 23974), (449, 24106), (455, 24130), (458, 24148), (484, 24301), (487, 24316), (489, 24328), (490, 24331), (491, 24337), (503, 24382), (508, 24400), (511, 24412), (513, 24418), (519, 24430), (523, 24439), (539, 24493), (551, 24562), (557, 24595), (559, 24601), (572, 24664), (573, 24667), (577, 24685), (582, 24706), (583, 24715),

Gene: Gezellig_33 Start: 28352, Stop: 30274, Start Num: 28

Candidate Starts for Gezellig_33:

(Start: 28 @28352 has 17 MA's), (57, 28475), (65, 28496), (86, 28544), (138, 28652), (149, 28673), (182, 28754), (195, 28790), (197, 28793), (220, 28871), (221, 28874), (222, 28880), (230, 28901), (238, 28931), (241, 28937), (283, 29072), (315, 29159), (320, 29168), (323, 29174), (326, 29180), (349, 29255), (358, 29288), (362, 29309), (379, 29381), (391, 29405), (400, 29417), (413, 29474), (449, 29624), (455, 29648), (484, 29816), (487, 29831), (511, 29927), (543, 30038), (549, 30074),

Gene: Gibbles_26 Start: 31491, Stop: 33176, Start Num: 104

Candidate Starts for Gibbles_26:

(Start: 104 @31491 has 5 MA's), (136, 31554), (155, 31599), (170, 31635), (Start: 184 @31665 has 1 MA's), (262, 31914), (287, 32007), (319, 32076), (340, 32133), (343, 32139), (348, 32160), (353, 32178), (367, 32241), (437, 32469), (452, 32538), (453, 32541), (455, 32550), (468, 32616), (482, 32727), (500, 32820), (507, 32841), (560, 33039), (569, 33072),

Gene: Gizermo_25 Start: 20505, Stop: 22028, Start Num: 169

Candidate Starts for Gizermo_25:

(Start: 169 @20505 has 19 MA's), (207, 20577), (212, 20589), (221, 20616), (222, 20622), (225, 20640), (266, 20760), (270, 20769), (286, 20835), (337, 20949), (349, 20991), (358, 21021), (364, 21051), (376, 21111), (379, 21117), (389, 21141), (401, 21165), (409, 21183), (411, 21195), (414, 21213), (417, 21228), (419, 21234), (436, 21285), (441, 21312), (455, 21363), (481, 21531), (513, 21669), (521, 21690), (523, 21693), (526, 21705), (536, 21744), (560, 21891), (572, 21951), (573, 21954),

Gene: GodonK_92 Start: 54828, Stop: 56522, Start Num: 72

Candidate Starts for GodonK_92:

(Start: 72 @54828 has 5 MA's), (83, 54846), (84, 54852), (129, 54942), (Start: 133 @54948 has 3 MA's), (Start: 135 @54951 has 1 MA's), (154, 54972), (209, 55125), (211, 55128), (220, 55167), (248, 55263), (250, 55266), (261, 55299), (294, 55404), (326, 55455), (349, 55530), (362, 55584), (369, 55620), (386, 55662), (395, 55677), (449, 55887), (455, 55911), (476, 56043), (490, 56115), (512, 56205), (523, 56229), (525, 56238), (527, 56244), (531, 56262), (547, 56313),

Gene: Groundhog_27 Start: 21477, Stop: 23198, Start Num: 64

Candidate Starts for Groundhog_27:

(Start: 64 @21477 has 12 MA's), (136, 21621), (145, 21636), (187, 21735), (221, 21825), (230, 21861), (236, 21882), (256, 21954), (266, 21978), (280, 22032), (327, 22134), (356, 22230), (366, 22284), (375, 22332), (421, 22461), (427, 22479), (457, 22605), (491, 22809), (492, 22818), (515, 22899), (542, 22995), (567, 23094), (585, 23181),

Gene: Gustavo_36 Start: 31956, Stop: 33677, Start Num: 98

Candidate Starts for Gustavo_36:

(Start: 98 @31956 has 30 MA's), (155, 32079), (160, 32091), (188, 32157), (210, 32226), (218, 32262), (228, 32301), (281, 32487), (293, 32526), (316, 32586), (332, 32631), (349, 32691), (383, 32826), (386, 32832), (406, 32874), (410, 32889), (416, 32925), (424, 32946), (447, 33045), (467, 33129), (471, 33162), (476, 33207), (477, 33210), (484, 33246), (491, 33282), (493, 33294), (504, 33330), (515, 33366), (533, 33420),

Gene: GuuelaD_20 Start: 19262, Stop: 21058, Start Num: 51

Candidate Starts for GuuelaD_20:

(Start: 48 @19259 has 5 MA's), (Start: 51 @19262 has 26 MA's), (117, 19415), (127, 19439), (160, 19514), (166, 19535), (170, 19544), (211, 19646), (234, 19739), (243, 19763), (270, 19847), (280, 19892), (291, 19928), (299, 19943), (340, 20048), (350, 20081), (355, 20099), (356, 20102), (363, 20141), (371, 20180), (392, 20240), (394, 20243), (418, 20327), (420, 20336), (428, 20363), (456, 20474), (484, 20645), (503, 20720), (505, 20729), (513, 20756), (525, 20789), (530, 20804), (534, 20819), (536, 20825), (551, 20903), (552, 20906), (566, 20954), (584, 21041),

Gene: Hafay_20 Start: 19261, Stop: 21057, Start Num: 51

Candidate Starts for Hafay_20:

(Start: 48 @19258 has 5 MA's), (Start: 51 @19261 has 26 MA's), (117, 19414), (127, 19438), (166, 19534), (170, 19543), (191, 19585), (192, 19588), (201, 19618), (211, 19645), (234, 19738), (243, 19762), (270, 19846), (280, 19891), (291, 19927), (340, 20047), (345, 20065), (350, 20080), (355, 20098), (356, 20101), (371, 20179), (390, 20236), (392, 20239), (394, 20242), (418, 20326), (420, 20335), (428, 20362), (456, 20473), (457, 20476), (484, 20644), (503, 20719), (505, 20728), (513, 20755), (525, 20788), (530, 20803), (534, 20818), (536, 20824), (551, 20902), (552, 20905), (584, 21040),

Gene: Haley23_25 Start: 20505, Stop: 22028, Start Num: 169

Candidate Starts for Haley23_25:

(Start: 169 @20505 has 19 MA's), (207, 20577), (212, 20589), (221, 20616), (222, 20622), (225, 20640), (266, 20760), (270, 20769), (286, 20835), (337, 20949), (349, 20991), (358, 21021), (364,

21051), (376, 21111), (379, 21117), (389, 21141), (401, 21165), (409, 21183), (411, 21195), (414, 21213), (417, 21228), (419, 21234), (436, 21285), (441, 21312), (455, 21363), (481, 21531), (513, 21669), (521, 21690), (523, 21693), (526, 21705), (536, 21744), (560, 21891), (572, 21951), (573, 21954),

Gene: Halo3_34 Start: 28645, Stop: 30567, Start Num: 28

Candidate Starts for Halo3_34:

(Start: 28 @28645 has 17 MA's), (57, 28768), (65, 28789), (86, 28837), (138, 28945), (149, 28966), (182, 29047), (195, 29083), (197, 29086), (220, 29164), (221, 29167), (222, 29173), (230, 29194), (238, 29224), (241, 29230), (283, 29365), (315, 29452), (320, 29461), (323, 29467), (326, 29473), (358, 29581), (362, 29602), (379, 29674), (391, 29698), (400, 29710), (413, 29767), (449, 29917), (455, 29941), (484, 30109), (487, 30124), (511, 30220), (543, 30331), (549, 30367),

Gene: Heinz_25 Start: 19746, Stop: 21263, Start Num: 161

Candidate Starts for Heinz_25:

(Start: 161 @19746 has 2 MA's), (202, 19845), (231, 19941), (237, 19956), (238, 19962), (268, 20055), (276, 20097), (279, 20106), (311, 20190), (328, 20211), (362, 20331), (370, 20370), (376, 20400), (396, 20427), (406, 20454), (412, 20478), (423, 20526), (426, 20535), (427, 20538), (446, 20625), (447, 20628), (467, 20712), (501, 20919), (532, 21015), (543, 21063), (549, 21099), (553, 21123), (568, 21162), (581, 21234), (585, 21249),

Gene: Herbertwm_29 Start: 21904, Stop: 23925, Start Num: 19

Candidate Starts for Herbertwm_29:

(Start: 19 @21904 has 2 MA's), (41, 22018), (59, 22090), (105, 22192), (148, 22273), (166, 22330), (190, 22378), (220, 22480), (236, 22540), (280, 22690), (286, 22708), (291, 22726), (322, 22783), (336, 22822), (352, 22885), (356, 22891), (357, 22894), (364, 22936), (421, 23122), (423, 23128), (428, 23146), (451, 23239), (470, 23323), (488, 23467), (506, 23557), (525, 23614), (534, 23650), (546, 23698), (550, 23728), (551, 23731), (572, 23818), (588, 23893),

Gene: Herod_26 Start: 22926, Stop: 24431, Start Num: 168

Candidate Starts for Herod_26:

(43, 22611), (Start: 81 @22719 has 1 MA's), (111, 22788), (113, 22791), (124, 22815), (125, 22821), (Start: 168 @22926 has 29 MA's), (195, 22995), (199, 23007), (235, 23118), (237, 23124), (238, 23130), (241, 23136), (268, 23223), (275, 23259), (276, 23265), (279, 23274), (376, 23568), (406, 23622), (407, 23625), (412, 23646), (422, 23691), (447, 23796), (467, 23880), (476, 23961), (477, 23964), (532, 24183), (543, 24231), (553, 24291), (565, 24324), (568, 24330), (581, 24402),

Gene: Hibiscus_25 Start: 19694, Stop: 21211, Start Num: 161

Candidate Starts for Hibiscus_25:

(Start: 161 @19694 has 2 MA's), (202, 19793), (231, 19889), (237, 19904), (238, 19910), (268, 20003), (276, 20045), (279, 20054), (311, 20138), (328, 20159), (362, 20279), (370, 20318), (376, 20348), (396, 20375), (406, 20402), (412, 20426), (423, 20474), (426, 20483), (427, 20486), (446, 20573), (447, 20576), (467, 20660), (501, 20867), (532, 20963), (543, 21011), (549, 21047), (553, 21071), (568, 21110), (581, 21182), (585, 21197),

Gene: Holliday_29 Start: 22226, Stop: 24061, Start Num: 31

Candidate Starts for Holliday_29:

(Start: 31 @22226 has 22 MA's), (Start: 79 @22388 has 1 MA's), (91, 22418), (116, 22472), (124, 22487), (Start: 128 @22499 has 1 MA's), (129, 22502), (140, 22517), (142, 22520), (144, 22523), (182, 22613), (187, 22622), (189, 22625), (216, 22712), (221, 22733), (222, 22739), (230, 22760), (231, 22769), (238, 22790), (241, 22796), (285, 22898), (286, 22901), (302, 22931), (306, 22943), (321, 22967), (349, 23042), (351, 23054), (362, 23096), (368, 23129), (376, 23162), (379, 23168), (391, 23192), (400, 23204), (413, 23261), (417, 23279), (449, 23411), (455, 23435), (458, 23453), (484,

23606), (487, 23621), (489, 23633), (490, 23636), (491, 23642), (503, 23687), (508, 23705), (511, 23717), (513, 23723), (519, 23735), (523, 23744), (539, 23798), (551, 23867), (557, 23900), (559, 23906), (572, 23969), (573, 23972), (577, 23990), (582, 24011), (583, 24020),

Gene: Horus_29 Start: 22143, Stop: 23978, Start Num: 31

Candidate Starts for Horus_29:

(Start: 31 @22143 has 22 MA's), (Start: 79 @22305 has 1 MA's), (91, 22335), (116, 22389), (124, 22404), (Start: 128 @22416 has 1 MA's), (129, 22419), (140, 22434), (142, 22437), (144, 22440), (182, 22530), (187, 22539), (189, 22542), (216, 22629), (221, 22650), (222, 22656), (230, 22677), (231, 22686), (238, 22707), (241, 22713), (285, 22815), (286, 22818), (302, 22848), (306, 22860), (321, 22884), (325, 22893), (349, 22959), (351, 22971), (362, 23013), (368, 23046), (376, 23079), (379, 23085), (391, 23109), (400, 23121), (413, 23178), (417, 23196), (449, 23328), (455, 23352), (458, 23370), (484, 23523), (487, 23538), (490, 23553), (491, 23559), (503, 23604), (508, 23622), (511, 23634), (513, 23640), (519, 23652), (523, 23661), (539, 23715), (551, 23784), (557, 23817), (559, 23823), (572, 23886), (573, 23889), (577, 23907), (582, 23928), (583, 23937),

Gene: Hugley_26 Start: 22926, Stop: 24431, Start Num: 168

Candidate Starts for Hugley_26:

(43, 22611), (Start: 81 @22719 has 1 MA's), (111, 22788), (113, 22791), (124, 22815), (125, 22821), (Start: 168 @22926 has 29 MA's), (195, 22995), (199, 23007), (235, 23118), (237, 23124), (238, 23130), (241, 23136), (268, 23223), (275, 23259), (276, 23265), (279, 23274), (376, 23568), (406, 23622), (407, 23625), (412, 23646), (422, 23691), (447, 23796), (467, 23880), (476, 23961), (477, 23964), (532, 24183), (543, 24231), (553, 24291), (565, 24324), (568, 24330), (581, 24402),

Gene: Hyzer_28 Start: 23631, Stop: 25250, Start Num: 130

Candidate Starts for Hyzer_28:

(55, 23460), (56, 23463), (Start: 130 @23631 has 1 MA's), (162, 23709), (164, 23712), (180, 23739), (215, 23823), (220, 23838), (221, 23841), (235, 23892), (246, 23937), (266, 23985), (288, 24063), (337, 24174), (349, 24216), (358, 24246), (364, 24276), (389, 24366), (401, 24390), (409, 24408), (411, 24420), (414, 24438), (417, 24453), (419, 24459), (436, 24510), (441, 24537), (455, 24588), (473, 24678), (481, 24756), (490, 24798), (503, 24858), (513, 24894), (521, 24915), (523, 24918), (526, 24930), (536, 24969), (572, 25176), (573, 25179), (579, 25203),

Gene: Itos_20 Start: 19225, Stop: 21024, Start Num: 48

Candidate Starts for Itos_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371, 20146), (390, 20203), (394, 20209), (418, 20293), (420, 20302), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (505, 20695), (513, 20722), (520, 20740), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: JCole_23 Start: 19364, Stop: 20980, Start Num: 137

Candidate Starts for JCole_23:

(137, 19364), (166, 19436), (173, 19448), (195, 19496), (216, 19559), (221, 19580), (227, 19601), (231, 19616), (238, 19637), (241, 19643), (283, 19778), (287, 19787), (300, 19826), (303, 19835), (323, 19880), (326, 19886), (349, 19961), (358, 19994), (362, 20015), (376, 20081), (391, 20111), (400, 20123), (412, 20168), (417, 20198), (445, 20315), (449, 20330), (455, 20354), (464, 20396), (483, 20522), (484, 20525), (493, 20573), (511, 20636), (560, 20831), (566, 20855), (570, 20870), (572, 20891),

Gene: JKSyngboy_34 Start: 32531, Stop: 34252, Start Num: 98

Candidate Starts for JKSyngboy_34:

(Start: 98 @32531 has 30 MA's), (155, 32654), (160, 32666), (188, 32732), (210, 32801), (218, 32837), (281, 33062), (293, 33101), (316, 33161), (332, 33206), (349, 33266), (374, 33392), (383, 33401), (386, 33407), (406, 33449), (410, 33464), (412, 33473), (416, 33500), (424, 33521), (447, 33620), (467, 33704), (491, 33857), (493, 33869), (497, 33884), (504, 33905), (533, 33995), (551, 34088),

Gene: Jabberwocky_35 Start: 33678, Stop: 35399, Start Num: 98

Candidate Starts for Jabberwocky_35:

(Start: 98 @33678 has 30 MA's), (160, 33813), (176, 33855), (188, 33879), (228, 34023), (281, 34209), (293, 34248), (297, 34257), (326, 34329), (332, 34353), (351, 34425), (370, 34512), (383, 34548), (386, 34554), (406, 34596), (410, 34611), (412, 34620), (447, 34767), (467, 34851), (471, 34884), (477, 34932), (490, 34998), (491, 35004), (493, 35016), (503, 35046), (504, 35052), (515, 35088), (519, 35097), (533, 35142),

Gene: Jalleen_25 Start: 20144, Stop: 21667, Start Num: 169

Candidate Starts for Jalleen_25:

(Start: 169 @20144 has 19 MA's), (207, 20216), (212, 20228), (221, 20255), (225, 20279), (266, 20399), (270, 20408), (286, 20474), (337, 20588), (349, 20630), (358, 20660), (364, 20690), (379, 20756), (389, 20780), (401, 20804), (409, 20822), (411, 20834), (414, 20852), (417, 20867), (419, 20873), (436, 20924), (441, 20951), (455, 21002), (481, 21170), (513, 21308), (521, 21329), (523, 21332), (526, 21344), (536, 21383), (560, 21530), (572, 21590), (573, 21593),

Gene: Jambalaya_33 Start: 27999, Stop: 29921, Start Num: 28

Candidate Starts for Jambalaya_33:

(Start: 28 @27999 has 17 MA's), (57, 28122), (65, 28143), (86, 28191), (138, 28299), (149, 28320), (182, 28401), (195, 28437), (197, 28440), (220, 28518), (221, 28521), (222, 28527), (230, 28548), (238, 28578), (241, 28584), (283, 28719), (315, 28806), (320, 28815), (323, 28821), (326, 28827), (349, 28902), (358, 28935), (362, 28956), (379, 29028), (391, 29052), (400, 29064), (413, 29121), (449, 29271), (455, 29295), (484, 29463), (487, 29478), (511, 29574), (543, 29685), (549, 29721),

Gene: Jojo24_25 Start: 19691, Stop: 21388, Start Num: 80

Candidate Starts for Jojo24_25:

(49, 19616), (Start: 80 @19691 has 2 MA's), (129, 19790), (173, 19886), (182, 19901), (185, 19907), (220, 20018), (221, 20021), (222, 20027), (230, 20048), (235, 20066), (242, 20084), (250, 20117), (255, 20138), (273, 20186), (298, 20255), (318, 20291), (321, 20294), (349, 20375), (351, 20387), (362, 20429), (385, 20510), (386, 20513), (391, 20522), (400, 20534), (410, 20570), (413, 20591), (417, 20609), (421, 20624), (449, 20741), (455, 20765), (458, 20783), (484, 20936), (503, 21035), (508, 21053), (511, 21065), (523, 21092), (567, 21269), (574, 21308),

Gene: JonJames_55 Start: 39392, Stop: 41158, Start Num: 53

Candidate Starts for JonJames_55:

(Start: 53 @39392 has 2 MA's), (58, 39413), (191, 39707), (194, 39725), (197, 39734), (208, 39767), (230, 39851), (259, 39950), (317, 40097), (329, 40118), (349, 40184), (354, 40202), (364, 40247), (413, 40391), (423, 40430), (449, 40541), (474, 40667), (490, 40763), (498, 40805), (501, 40811), (513, 40853), (514, 40856),

Gene: Kahlid_20 Start: 19233, Stop: 21029, Start Num: 51

Candidate Starts for Kahlid_20:

(Start: 48 @19230 has 5 MA's), (Start: 51 @19233 has 26 MA's), (117, 19386), (127, 19410), (166, 19506), (170, 19515), (191, 19557), (192, 19560), (201, 19590), (211, 19617), (234, 19710), (243, 19734), (270, 19818), (280, 19863), (291, 19899), (340, 20019), (345, 20037), (350, 20052), (355, 20070), (356, 20073), (371, 20151), (390, 20208), (392, 20211), (394, 20214), (418, 20298), (420, 20307), (428, 20334), (456, 20445), (457, 20448), (484, 20616), (503, 20691), (505, 20700), (513, 20727), (525, 20760), (530, 20775), (534, 20790), (536, 20796), (551, 20874), (552, 20877), (566,

20925), (584, 21012),

Gene: Kamaru_29 Start: 22226, Stop: 24061, Start Num: 31

Candidate Starts for Kamaru_29:

(Start: 31 @22226 has 22 MA's), (Start: 79 @22388 has 1 MA's), (91, 22418), (116, 22472), (124, 22487), (Start: 128 @22499 has 1 MA's), (129, 22502), (140, 22517), (142, 22520), (144, 22523), (182, 22613), (187, 22622), (189, 22625), (216, 22712), (221, 22733), (222, 22739), (230, 22760), (231, 22769), (238, 22790), (241, 22796), (285, 22898), (286, 22901), (302, 22931), (306, 22943), (321, 22967), (349, 23042), (351, 23054), (362, 23096), (368, 23129), (376, 23162), (379, 23168), (391, 23192), (400, 23204), (413, 23261), (417, 23279), (449, 23411), (455, 23435), (458, 23453), (484, 23606), (487, 23621), (489, 23633), (490, 23636), (491, 23642), (503, 23687), (508, 23705), (511, 23717), (513, 23723), (519, 23735), (523, 23744), (539, 23798), (551, 23867), (557, 23900), (559, 23906), (572, 23969), (573, 23972), (577, 23990), (582, 24011), (583, 24020),

Gene: Kamashten_36 Start: 33130, Stop: 35052, Start Num: 26

Candidate Starts for Kamashten_36:

(Start: 26 @33130 has 23 MA's), (60, 33265), (65, 33274), (82, 33307), (90, 33331), (124, 33400), (156, 33475), (221, 33667), (222, 33673), (230, 33694), (235, 33712), (238, 33724), (255, 33784), (275, 33838), (321, 33952), (349, 34039), (362, 34093), (373, 34147), (376, 34159), (391, 34189), (400, 34201), (412, 34246), (413, 34258), (417, 34276), (425, 34303), (442, 34381), (449, 34408), (455, 34432), (476, 34555), (483, 34597), (503, 34681), (511, 34711), (523, 34738), (539, 34792), (545, 34822), (557, 34894), (560, 34903),

Gene: Kampe_27 Start: 31352, Stop: 33037, Start Num: 104

Candidate Starts for Kampe_27:

(Start: 104 @31352 has 5 MA's), (136, 31415), (155, 31460), (170, 31496), (Start: 184 @31526 has 1 MA's), (262, 31775), (287, 31868), (319, 31937), (340, 31994), (343, 32000), (348, 32021), (353, 32039), (367, 32102), (437, 32330), (455, 32411), (468, 32477), (482, 32588), (500, 32681), (507, 32702), (560, 32900), (569, 32933),

Gene: Keitabear_38 Start: 35100, Stop: 37022, Start Num: 26

Candidate Starts for Keitabear_38:

(Start: 26 @35100 has 23 MA's), (60, 35235), (82, 35277), (90, 35301), (124, 35370), (156, 35445), (221, 35637), (222, 35643), (230, 35664), (235, 35682), (238, 35694), (255, 35754), (275, 35808), (321, 35922), (349, 36009), (362, 36063), (376, 36129), (391, 36159), (400, 36171), (412, 36216), (413, 36228), (417, 36246), (425, 36273), (442, 36351), (449, 36378), (455, 36402), (476, 36525), (483, 36567), (503, 36651), (511, 36681), (539, 36762), (545, 36792), (557, 36864), (560, 36873),

Gene: Kenna_28 Start: 22119, Stop: 23954, Start Num: 31

Candidate Starts for Kenna_28:

(Start: 31 @22119 has 22 MA's), (Start: 79 @22281 has 1 MA's), (91, 22311), (116, 22365), (124, 22380), (Start: 128 @22392 has 1 MA's), (129, 22395), (140, 22410), (142, 22413), (144, 22416), (182, 22506), (187, 22515), (189, 22518), (216, 22605), (221, 22626), (222, 22632), (230, 22653), (231, 22662), (238, 22683), (241, 22689), (285, 22791), (286, 22794), (302, 22824), (306, 22836), (321, 22860), (349, 22935), (351, 22947), (362, 22989), (368, 23022), (376, 23055), (379, 23061), (391, 23085), (400, 23097), (413, 23154), (417, 23172), (449, 23304), (455, 23328), (458, 23346), (484, 23499), (487, 23514), (490, 23529), (491, 23535), (503, 23580), (508, 23598), (511, 23610), (513, 23616), (519, 23628), (523, 23637), (539, 23691), (551, 23760), (557, 23793), (559, 23799), (572, 23862), (573, 23865), (577, 23883), (582, 23904), (583, 23913),

Gene: Kewpiedoll_36 Start: 32537, Stop: 34258, Start Num: 98

Candidate Starts for Kewpiedoll_36:

(Start: 98 @32537 has 30 MA's), (160, 32672), (162, 32681), (176, 32714), (188, 32738), (210, 32807), (228, 32882), (281, 33068), (293, 33107), (297, 33116), (302, 33131), (326, 33188), (332, 33212), (351, 33284), (370, 33371), (383, 33407), (386, 33413), (406, 33455), (410, 33470), (412, 33479), (447, 33626), (467, 33710), (471, 33743), (477, 33791), (490, 33857), (491, 33863), (493, 33875), (503, 33905), (504, 33911), (515, 33947), (519, 33956), (533, 34001),

Gene: KimmyK_35 Start: 28934, Stop: 30856, Start Num: 28

Candidate Starts for KimmyK_35:

(Start: 28 @28934 has 17 MA's), (57, 29057), (65, 29078), (86, 29126), (138, 29234), (149, 29255), (182, 29336), (195, 29372), (197, 29375), (220, 29453), (221, 29456), (222, 29462), (230, 29483), (238, 29513), (241, 29519), (283, 29654), (315, 29741), (320, 29750), (323, 29756), (326, 29762), (349, 29837), (358, 29870), (362, 29891), (379, 29963), (391, 29987), (400, 29999), (413, 30056), (449, 30206), (455, 30230), (484, 30398), (487, 30413), (511, 30509), (543, 30620), (549, 30656),

Gene: Kita_28 Start: 22923, Stop: 24428, Start Num: 168

Candidate Starts for Kita_28:

(Start: 168 @22923 has 29 MA's), (195, 22992), (199, 23004), (235, 23115), (238, 23127), (241, 23133), (268, 23220), (275, 23256), (276, 23262), (279, 23271), (376, 23565), (406, 23619), (407, 23622), (412, 23643), (422, 23688), (447, 23793), (467, 23877), (476, 23958), (477, 23961), (501, 24084), (532, 24180), (543, 24228), (553, 24288), (565, 24321), (568, 24327), (581, 24399),

Gene: Kroos_37 Start: 32709, Stop: 34430, Start Num: 98

Candidate Starts for Kroos_37:

(Start: 98 @32709 has 30 MA's), (155, 32832), (160, 32844), (188, 32910), (210, 32979), (218, 33015), (228, 33054), (281, 33240), (293, 33279), (316, 33339), (332, 33384), (349, 33444), (383, 33579), (386, 33585), (406, 33627), (410, 33642), (416, 33678), (424, 33699), (447, 33798), (467, 33882), (471, 33915), (476, 33960), (477, 33963), (484, 33999), (491, 34035), (493, 34047), (504, 34083), (515, 34119), (533, 34173),

Gene: Kudfre_29 Start: 24004, Stop: 25656, Start Num: 92

Candidate Starts for Kudfre_29:

(75, 23965), (Start: 92 @24004 has 5 MA's), (102, 24025), (181, 24178), (Start: 184 @24184 has 1 MA's), (186, 24187), (191, 24202), (200, 24235), (203, 24244), (210, 24256), (220, 24298), (221, 24301), (222, 24307), (226, 24319), (230, 24328), (235, 24346), (238, 24358), (241, 24364), (261, 24430), (268, 24445), (271, 24451), (317, 24586), (329, 24613), (330, 24619), (358, 24712), (400, 24832), (412, 24874), (413, 24886), (449, 25036), (455, 25060), (458, 25078), (471, 25141), (484, 25228), (487, 25243), (491, 25264), (503, 25309), (508, 25327), (514, 25348), (529, 25390), (534, 25414), (547, 25462), (562, 25537), (572, 25588), (586, 25651),

Gene: Kuwabara_28 Start: 21545, Stop: 23329, Start Num: 31

Candidate Starts for Kuwabara_28:

(Start: 31 @21545 has 22 MA's), (33, 21560), (44, 21587), (52, 21617), (82, 21689), (85, 21701), (119, 21764), (124, 21776), (150, 21818), (167, 21857), (171, 21866), (204, 21944), (221, 22001), (222, 22007), (230, 22028), (231, 22037), (238, 22058), (241, 22064), (285, 22166), (286, 22169), (302, 22199), (306, 22211), (321, 22235), (325, 22244), (349, 22310), (351, 22322), (362, 22364), (368, 22397), (376, 22430), (379, 22436), (391, 22460), (400, 22472), (413, 22529), (417, 22547), (449, 22679), (455, 22703), (458, 22721), (484, 22874), (487, 22889), (490, 22904), (491, 22910), (503, 22955), (508, 22973), (511, 22985), (513, 22991), (519, 23003), (523, 23012), (539, 23066), (551, 23135), (557, 23168), (559, 23174), (572, 23237), (573, 23240), (577, 23258), (582, 23279), (583, 23288),

Gene: Kwobi_38 Start: 32695, Stop: 34416, Start Num: 98

Candidate Starts for Kwobi_38:

(Start: 98 @32695 has 30 MA's), (155, 32818), (160, 32830), (188, 32896), (210, 32965), (218, 33001), (281, 33226), (293, 33265), (316, 33325), (332, 33370), (349, 33430), (383, 33565), (386, 33571), (406, 33613), (410, 33628), (416, 33664), (424, 33685), (447, 33784), (467, 33868), (471, 33901), (476, 33946), (477, 33949), (484, 33985), (491, 34021), (493, 34033), (504, 34069), (515, 34105), (533, 34159),

Gene: Lamberg_24 Start: 19408, Stop: 20961, Start Num: 133

Candidate Starts for Lamberg_24:

(Start: 133 @19408 has 3 MA's), (166, 19477), (174, 19492), (194, 19534), (195, 19540), (221, 19624), (222, 19630), (230, 19651), (235, 19669), (239, 19681), (242, 19687), (304, 19843), (330, 19885), (358, 19978), (362, 19999), (376, 20065), (391, 20095), (400, 20107), (413, 20164), (449, 20314), (455, 20338), (484, 20506), (503, 20605), (508, 20623), (511, 20635), (560, 20812), (567, 20839), (574, 20878),

Gene: Lennon_38 Start: 34887, Stop: 36809, Start Num: 26

Candidate Starts for Lennon_38:

(Start: 26 @34887 has 23 MA's), (60, 35022), (65, 35031), (82, 35064), (90, 35088), (124, 35157), (156, 35232), (221, 35424), (222, 35430), (230, 35451), (235, 35469), (238, 35481), (255, 35541), (275, 35595), (321, 35709), (349, 35796), (362, 35850), (373, 35904), (376, 35916), (391, 35946), (400, 35958), (412, 36003), (413, 36015), (417, 36033), (425, 36060), (442, 36138), (449, 36165), (455, 36189), (476, 36312), (483, 36354), (503, 36438), (511, 36468), (539, 36549), (545, 36579), (557, 36651), (560, 36660),

Gene: Leroy_29 Start: 22144, Stop: 23979, Start Num: 31

Candidate Starts for Leroy_29:

(Start: 31 @22144 has 22 MA's), (Start: 79 @22306 has 1 MA's), (91, 22336), (116, 22390), (124, 22405), (Start: 128 @22417 has 1 MA's), (129, 22420), (140, 22435), (142, 22438), (144, 22441), (182, 22531), (187, 22540), (189, 22543), (216, 22630), (221, 22651), (222, 22657), (230, 22678), (231, 22687), (238, 22708), (241, 22714), (285, 22816), (286, 22819), (302, 22849), (306, 22861), (321, 22885), (325, 22894), (349, 22960), (351, 22972), (362, 23014), (368, 23047), (376, 23080), (379, 23086), (391, 23110), (400, 23122), (413, 23179), (417, 23197), (449, 23329), (455, 23353), (458, 23371), (484, 23524), (487, 23539), (490, 23554), (491, 23560), (503, 23605), (508, 23623), (511, 23635), (513, 23641), (519, 23653), (523, 23662), (539, 23716), (551, 23785), (557, 23818), (559, 23824), (572, 23887), (573, 23890), (577, 23908), (582, 23929), (583, 23938),

Gene: Lewan_20 Start: 19228, Stop: 21024, Start Num: 51

Candidate Starts for Lewan_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (291, 19894), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371, 20146), (390, 20203), (392, 20206), (394, 20209), (411, 20257), (418, 20293), (420, 20302), (428, 20329), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (505, 20695), (513, 20722), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: LilDestine_20 Start: 19227, Stop: 21023, Start Num: 51

Candidate Starts for LilDestine_20:

(Start: 48 @19224 has 5 MA's), (Start: 51 @19227 has 26 MA's), (117, 19380), (127, 19404), (166, 19500), (170, 19509), (191, 19551), (192, 19554), (201, 19584), (211, 19611), (234, 19704), (243, 19728), (270, 19812), (280, 19857), (291, 19893), (340, 20013), (345, 20031), (350, 20046), (355, 20064), (356, 20067), (371, 20145), (390, 20202), (392, 20205), (394, 20208), (418, 20292), (420, 20301), (428, 20328), (456, 20439), (457, 20442), (484, 20610), (503, 20685), (505, 20694), (513, 20721), (525, 20754), (530, 20769), (534, 20784), (536, 20790), (551, 20868), (552, 20871), (566,

20919), (584, 21006),

Gene: LilHam_34 Start: 31298, Stop: 33019, Start Num: 98

Candidate Starts for LilHam_34:

(Start: 98 @31298 has 30 MA's), (155, 31421), (160, 31433), (188, 31499), (210, 31568), (218, 31604), (281, 31829), (293, 31868), (316, 31928), (332, 31973), (349, 32033), (383, 32168), (386, 32174), (406, 32216), (410, 32231), (416, 32267), (424, 32288), (447, 32387), (467, 32471), (471, 32504), (476, 32549), (477, 32552), (484, 32588), (491, 32624), (493, 32636), (504, 32672), (515, 32708), (533, 32762),

Gene: LilJank_30 Start: 25864, Stop: 27450, Start Num: 92

Candidate Starts for LilJank_30:

(Start: 92 @25864 has 5 MA's), (111, 25900), (179, 26044), (189, 26065), (190, 26068), (191, 26071), (196, 26095), (208, 26125), (210, 26128), (220, 26170), (221, 26173), (230, 26200), (231, 26209), (238, 26230), (241, 26236), (253, 26287), (255, 26290), (278, 26311), (302, 26353), (314, 26374), (317, 26377), (329, 26389), (349, 26455), (362, 26509), (369, 26545), (400, 26608), (408, 26632), (412, 26650), (413, 26662), (417, 26680), (421, 26695), (449, 26812), (450, 26818), (455, 26836), (457, 26842), (458, 26854), (465, 26881), (478, 26980), (484, 27004), (487, 27019), (496, 27058), (503, 27085), (504, 27091), (508, 27103), (511, 27115), (513, 27121), (526, 27157), (541, 27211), (567, 27340), (571, 27367), (580, 27400),

Gene: Lilas_28 Start: 22772, Stop: 24724, Start Num: 18

Candidate Starts for Lilas_28:

(1, 22484), (3, 22541), (4, 22556), (6, 22592), (7, 22637), (8, 22640), (Start: 18 @22772 has 8 MA's), (23, 22787), (Start: 26 @22826 has 23 MA's), (Start: 28 @22829 has 17 MA's), (106, 23057), (122, 23084), (Start: 128 @23099 has 1 MA's), (221, 23333), (222, 23339), (226, 23351), (250, 23429), (255, 23450), (296, 23570), (317, 23612), (349, 23705), (351, 23717), (362, 23759), (391, 23849), (400, 23861), (413, 23918), (421, 23951), (430, 23984), (444, 24044), (449, 24068), (454, 24086), (484, 24260), (485, 24266), (495, 24314), (551, 24536), (570, 24617), (572, 24638),

Gene: LilyPad_26 Start: 21924, Stop: 23648, Start Num: 45

Candidate Starts for LilyPad_26:

(Start: 45 @21924 has 2 MA's), (68, 21999), (73, 22005), (77, 22014), (94, 22056), (155, 22188), (189, 22266), (191, 22272), (202, 22308), (226, 22392), (249, 22467), (257, 22488), (269, 22512), (282, 22566), (313, 22620), (340, 22674), (345, 22683), (346, 22686), (392, 22821), (394, 22824), (417, 22908), (432, 22959), (434, 22962), (439, 22980), (445, 23016), (457, 23055), (472, 23133), (490, 23247), (500, 23292), (518, 23346), (525, 23355), (527, 23361), (555, 23505), (561, 23523),

Gene: LitninMcQueen_28 Start: 21875, Stop: 23710, Start Num: 31

Candidate Starts for LitninMcQueen_28:

(Start: 31 @21875 has 22 MA's), (Start: 79 @22037 has 1 MA's), (91, 22067), (116, 22121), (124, 22136), (Start: 128 @22148 has 1 MA's), (129, 22151), (140, 22166), (142, 22169), (144, 22172), (182, 22262), (187, 22271), (189, 22274), (216, 22361), (221, 22382), (222, 22388), (230, 22409), (231, 22418), (238, 22439), (241, 22445), (285, 22547), (286, 22550), (302, 22580), (306, 22592), (321, 22616), (349, 22691), (351, 22703), (362, 22745), (368, 22778), (376, 22811), (379, 22817), (391, 22841), (400, 22853), (413, 22910), (417, 22928), (449, 23060), (455, 23084), (458, 23102), (484, 23255), (487, 23270), (489, 23282), (490, 23285), (491, 23291), (503, 23336), (508, 23354), (511, 23366), (513, 23372), (519, 23384), (523, 23393), (539, 23447), (543, 23471), (557, 23549), (559, 23555), (572, 23618), (573, 23621), (577, 23639), (582, 23660), (583, 23669),

Gene: LittleFella_27 Start: 23800, Stop: 25635, Start Num: 45

Candidate Starts for LittleFella_27:

(Start: 45 @23800 has 2 MA's), (68, 23875), (73, 23881), (77, 23890), (91, 23923), (94, 23932), (125, 23998), (189, 24130), (191, 24136), (202, 24172), (223, 24238), (226, 24256), (266, 24370), (286, 24445), (288, 24448), (337, 24559), (364, 24661), (380, 24730), (387, 24745), (389, 24751), (401, 24775), (419, 24844), (436, 24895), (445, 24940), (455, 24973), (480, 25153), (494, 25225), (542, 25408), (551, 25468),

Gene: Loadrie_20 Start: 19260, Stop: 21056, Start Num: 51

Candidate Starts for Loadrie_20:

(Start: 48 @19257 has 5 MA's), (Start: 51 @19260 has 26 MA's), (117, 19413), (127, 19437), (166, 19533), (170, 19542), (192, 19587), (201, 19617), (211, 19644), (234, 19737), (243, 19761), (270, 19845), (280, 19890), (345, 20064), (350, 20079), (355, 20097), (356, 20100), (371, 20178), (390, 20235), (394, 20241), (418, 20325), (420, 20334), (456, 20472), (457, 20475), (484, 20643), (503, 20718), (505, 20727), (513, 20754), (525, 20787), (530, 20802), (534, 20817), (536, 20823), (551, 20901), (552, 20904), (584, 21039),

Gene: LordFarquaad_25 Start: 20498, Stop: 22021, Start Num: 169

Candidate Starts for LordFarquaad_25:

(Start: 169 @20498 has 19 MA's), (207, 20570), (212, 20582), (221, 20609), (225, 20633), (266, 20753), (270, 20762), (286, 20828), (337, 20942), (349, 20984), (358, 21014), (364, 21044), (379, 21110), (389, 21134), (401, 21158), (409, 21176), (411, 21188), (414, 21206), (417, 21221), (419, 21227), (436, 21278), (441, 21305), (455, 21356), (481, 21524), (486, 21545), (502, 21623), (513, 21662), (521, 21683), (523, 21686), (526, 21698), (536, 21737), (560, 21884), (572, 21944), (573, 21947),

Gene: Love_41 Start: 34670, Stop: 36595, Start Num: 26

Candidate Starts for Love_41:

(Start: 26 @34670 has 23 MA's), (60, 34805), (65, 34814), (82, 34847), (90, 34871), (124, 34940), (156, 35015), (221, 35207), (222, 35213), (230, 35234), (235, 35252), (238, 35264), (255, 35324), (275, 35378), (321, 35495), (349, 35582), (362, 35636), (376, 35702), (391, 35732), (400, 35744), (412, 35789), (413, 35801), (417, 35819), (425, 35846), (442, 35924), (449, 35951), (455, 35975), (476, 36098), (483, 36140), (503, 36224), (511, 36254), (523, 36281), (539, 36335), (545, 36365), (557, 36437), (560, 36446),

Gene: Lton_24 Start: 19437, Stop: 21029, Start Num: 134

Candidate Starts for Lton_24:

(Start: 134 @19437 has 5 MA's), (166, 19506), (174, 19521), (178, 19527), (195, 19569), (204, 19596), (222, 19659), (230, 19680), (233, 19695), (250, 19749), (253, 19767), (255, 19770), (261, 19782), (329, 19947), (349, 20013), (358, 20046), (385, 20145), (391, 20157), (400, 20169), (413, 20226), (421, 20259), (423, 20265), (449, 20376), (484, 20571), (503, 20652), (511, 20682), (543, 20793), (548, 20808), (551, 20838), (557, 20871), (572, 20940),

Gene: Lucky10_25 Start: 20304, Stop: 22139, Start Num: 36

Candidate Starts for Lucky10_25:

(9, 20088), (13, 20124), (15, 20169), (16, 20184), (Start: 36 @20304 has 3 MA's), (46, 20361), (82, 20448), (85, 20460), (Start: 101 @20493 has 1 MA's), (103, 20499), (119, 20523), (124, 20535), (154, 20580), (165, 20610), (167, 20616), (171, 20625), (187, 20649), (201, 20691), (221, 20760), (222, 20766), (230, 20787), (235, 20805), (238, 20817), (241, 20823), (255, 20877), (349, 21132), (350, 21135), (362, 21186), (369, 21222), (376, 21252), (379, 21258), (391, 21282), (400, 21294), (413, 21351), (417, 21369), (449, 21501), (450, 21507), (455, 21525), (484, 21693), (503, 21774), (515, 21816), (523, 21831), (543, 21912), (549, 21948), (571, 22047),

Gene: Lutum_29 Start: 22119, Stop: 23954, Start Num: 31

Candidate Starts for Lutum_29:

(Start: 31 @22119 has 22 MA's), (Start: 79 @22281 has 1 MA's), (91, 22311), (116, 22365), (124, 22380), (Start: 128 @22392 has 1 MA's), (129, 22395), (140, 22410), (142, 22413), (144, 22416), (182, 22506), (187, 22515), (189, 22518), (216, 22605), (221, 22626), (222, 22632), (230, 22653), (231, 22662), (238, 22683), (241, 22689), (285, 22791), (286, 22794), (302, 22824), (306, 22836), (321, 22860), (349, 22935), (351, 22947), (362, 22989), (368, 23022), (376, 23055), (379, 23061), (391, 23085), (400, 23097), (413, 23154), (417, 23172), (449, 23304), (455, 23328), (458, 23346), (484, 23499), (487, 23514), (490, 23529), (491, 23535), (503, 23580), (508, 23598), (511, 23610), (513, 23616), (519, 23628), (523, 23637), (539, 23691), (551, 23760), (557, 23793), (559, 23799), (572, 23862), (573, 23865), (577, 23883), (582, 23904), (583, 23913),

Gene: Lynnae_20 Start: 19216, Stop: 21012, Start Num: 51

Candidate Starts for Lynnae_20:

(Start: 48 @19213 has 5 MA's), (Start: 51 @19216 has 26 MA's), (117, 19369), (127, 19393), (166, 19489), (170, 19498), (191, 19540), (192, 19543), (201, 19573), (211, 19600), (234, 19693), (243, 19717), (270, 19801), (280, 19846), (291, 19882), (340, 20002), (345, 20020), (350, 20035), (355, 20053), (356, 20056), (371, 20134), (390, 20191), (392, 20194), (394, 20197), (418, 20281), (420, 20290), (428, 20317), (456, 20428), (457, 20431), (484, 20599), (503, 20674), (505, 20683), (513, 20710), (525, 20743), (530, 20758), (534, 20773), (536, 20779), (551, 20857), (552, 20860), (566, 20908), (584, 20995),

Gene: Madavieve_26 Start: 23206, Stop: 24711, Start Num: 168

Candidate Starts for Madavieve_26:

(43, 22891), (Start: 81 @22999 has 1 MA's), (111, 23068), (113, 23071), (124, 23095), (125, 23101), (Start: 168 @23206 has 29 MA's), (195, 23275), (199, 23287), (235, 23398), (237, 23404), (238, 23410), (241, 23416), (268, 23503), (275, 23539), (276, 23545), (279, 23554), (376, 23848), (406, 23902), (407, 23905), (412, 23926), (422, 23971), (447, 24076), (467, 24160), (476, 24241), (477, 24244), (532, 24463), (543, 24511), (553, 24571), (565, 24604), (568, 24610), (581, 24682),

Gene: Madeline_26 Start: 23224, Stop: 24729, Start Num: 168

Candidate Starts for Madeline_26:

(43, 22909), (Start: 81 @23017 has 1 MA's), (111, 23086), (113, 23089), (124, 23113), (125, 23119), (Start: 168 @23224 has 29 MA's), (195, 23293), (199, 23305), (235, 23416), (237, 23422), (238, 23428), (241, 23434), (268, 23521), (275, 23557), (276, 23563), (279, 23572), (376, 23866), (406, 23920), (407, 23923), (412, 23944), (422, 23989), (447, 24094), (467, 24178), (476, 24259), (477, 24262), (532, 24481), (543, 24529), (553, 24589), (565, 24622), (568, 24628), (581, 24700),

Gene: Malibo_28 Start: 21996, Stop: 23735, Start Num: 69

Candidate Starts for Malibo_28:

(17, 21789), (29, 21858), (30, 21861), (38, 21885), (39, 21891), (Start: 69 @21996 has 1 MA's), (129, 22107), (147, 22134), (220, 22335), (221, 22338), (222, 22344), (226, 22356), (250, 22434), (255, 22455), (317, 22617), (349, 22710), (351, 22722), (362, 22770), (377, 22842), (391, 22860), (400, 22872), (413, 22929), (430, 22995), (449, 23079), (454, 23097), (458, 23121), (484, 23271), (495, 23325), (551, 23547), (570, 23628), (572, 23649),

Gene: Manasvini_28 Start: 22923, Stop: 24428, Start Num: 168

Candidate Starts for Manasvini_28:

(Start: 168 @22923 has 29 MA's), (195, 22992), (199, 23004), (235, 23115), (238, 23127), (241, 23133), (268, 23220), (275, 23256), (276, 23262), (279, 23271), (376, 23565), (406, 23619), (407, 23622), (412, 23643), (422, 23688), (447, 23793), (467, 23877), (476, 23958), (477, 23961), (501, 24084), (532, 24180), (543, 24228), (553, 24288), (565, 24321), (568, 24327), (581, 24399),

Gene: Mareelih_102 Start: 61923, Stop: 63602, Start Num: 72

Candidate Starts for Mareelih_102:

(Start: 64 @61905 has 12 MA's), (Start: 72 @61923 has 5 MA's), (Start: 93 @61965 has 1 MA's), (96, 61974), (Start: 133 @62040 has 3 MA's), (Start: 135 @62043 has 1 MA's), (154, 62064), (194, 62175), (209, 62217), (248, 62355), (255, 62379), (350, 62625), (376, 62742), (395, 62769), (400, 62775), (413, 62829), (423, 62868), (449, 62979), (453, 62994), (455, 63003), (486, 63174), (490, 63195), (513, 63288), (547, 63396), (583, 63573),

Gene: Maridalia_27 Start: 22923, Stop: 24428, Start Num: 168

Candidate Starts for Maridalia_27:

(Start: 168 @22923 has 29 MA's), (195, 22992), (199, 23004), (235, 23115), (238, 23127), (241, 23133), (268, 23220), (275, 23256), (276, 23262), (279, 23271), (376, 23565), (406, 23619), (407, 23622), (412, 23643), (422, 23688), (447, 23793), (467, 23877), (476, 23958), (477, 23961), (501, 24084), (532, 24180), (543, 24228), (553, 24288), (565, 24321), (568, 24327), (581, 24399),

Gene: Marteena_28 Start: 22623, Stop: 24575, Start Num: 18

Candidate Starts for Marteena_28:

(1, 22335), (3, 22392), (4, 22407), (6, 22443), (7, 22488), (8, 22491), (Start: 18 @22623 has 8 MA's), (23, 22638), (Start: 26 @22677 has 23 MA's), (Start: 28 @22680 has 17 MA's), (106, 22908), (122, 22935), (Start: 128 @22950 has 1 MA's), (221, 23184), (222, 23190), (226, 23202), (250, 23280), (255, 23301), (296, 23421), (317, 23463), (349, 23556), (351, 23568), (362, 23610), (391, 23700), (400, 23712), (413, 23769), (421, 23802), (430, 23835), (444, 23895), (449, 23919), (454, 23937), (484, 24111), (485, 24117), (495, 24165), (551, 24387), (570, 24468), (572, 24489),

Gene: Matteo_24 Start: 19369, Stop: 20961, Start Num: 134

Candidate Starts for Matteo_24:

(40, 19135), (43, 19150), (52, 19186), (66, 19231), (67, 19234), (Start: 134 @19369 has 5 MA's), (166, 19438), (174, 19453), (195, 19501), (221, 19585), (222, 19591), (230, 19612), (233, 19627), (250, 19681), (255, 19702), (261, 19714), (329, 19879), (358, 19978), (385, 20077), (391, 20089), (400, 20101), (413, 20158), (421, 20191), (423, 20197), (449, 20308), (484, 20503), (503, 20584), (511, 20614), (543, 20725), (551, 20770), (566, 20836), (572, 20872),

Gene: McCrothy_38 Start: 34478, Stop: 36403, Start Num: 26

Candidate Starts for McCrothy_38:

(Start: 26 @34478 has 23 MA's), (60, 34613), (65, 34622), (82, 34655), (90, 34679), (124, 34748), (156, 34823), (221, 35015), (222, 35021), (230, 35042), (235, 35060), (238, 35072), (255, 35132), (275, 35186), (321, 35303), (349, 35390), (362, 35444), (376, 35510), (391, 35540), (400, 35552), (412, 35597), (413, 35609), (417, 35627), (425, 35654), (442, 35732), (449, 35759), (455, 35783), (476, 35906), (483, 35948), (503, 36032), (511, 36062), (523, 36089), (539, 36143), (545, 36173), (557, 36245), (560, 36254),

Gene: McKinley_40 Start: 34696, Stop: 36618, Start Num: 26

Candidate Starts for McKinley_40:

(Start: 26 @34696 has 23 MA's), (60, 34831), (65, 34840), (82, 34873), (90, 34897), (124, 34966), (138, 34996), (156, 35041), (221, 35233), (222, 35239), (230, 35260), (235, 35278), (238, 35290), (255, 35350), (275, 35404), (321, 35518), (349, 35605), (362, 35659), (376, 35725), (391, 35755), (400, 35767), (412, 35812), (413, 35824), (417, 35842), (425, 35869), (442, 35947), (449, 35974), (455, 35998), (476, 36121), (483, 36163), (503, 36247), (511, 36277), (523, 36304), (539, 36358), (545, 36388), (557, 36460), (560, 36469),

Gene: Miley16_20 Start: 19228, Stop: 21024, Start Num: 51

Candidate Starts for Miley16_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371,

20146), (390, 20203), (394, 20209), (418, 20293), (420, 20302), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (505, 20695), (513, 20722), (520, 20740), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: MkaliMitinis3_20 Start: 19228, Stop: 21024, Start Num: 51

Candidate Starts for MkaliMitinis3_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371, 20146), (390, 20203), (392, 20206), (394, 20209), (418, 20293), (420, 20302), (428, 20329), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (505, 20695), (513, 20722), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: Mocha12_25 Start: 20505, Stop: 22028, Start Num: 169

Candidate Starts for Mocha12_25:

(Start: 169 @20505 has 19 MA's), (207, 20577), (212, 20589), (221, 20616), (222, 20622), (225, 20640), (266, 20760), (270, 20769), (286, 20835), (337, 20949), (349, 20991), (358, 21021), (364, 21051), (376, 21111), (379, 21117), (389, 21141), (401, 21165), (409, 21183), (411, 21195), (414, 21213), (417, 21228), (419, 21234), (436, 21285), (441, 21312), (455, 21363), (481, 21531), (513, 21669), (521, 21690), (523, 21693), (526, 21705), (536, 21744), (560, 21891), (572, 21951), (573, 21954),

Gene: MoontowerMania_36 Start: 32904, Stop: 34625, Start Num: 98

Candidate Starts for MoontowerMania_36:

(Start: 98 @32904 has 30 MA's), (160, 33039), (162, 33048), (176, 33081), (188, 33105), (210, 33174), (217, 33204), (228, 33249), (281, 33435), (293, 33474), (297, 33483), (302, 33498), (326, 33555), (332, 33579), (351, 33651), (370, 33738), (383, 33774), (386, 33780), (406, 33822), (410, 33837), (446, 33990), (447, 33993), (454, 34020), (467, 34077), (471, 34110), (477, 34158), (490, 34224), (491, 34230), (493, 34242), (503, 34272), (504, 34278), (515, 34314), (519, 34323), (533, 34368), (560, 34497),

Gene: Moosehead_24 Start: 19352, Stop: 20872, Start Num: 169

Candidate Starts for Moosehead_24:

(Start: 169 @19352 has 19 MA's), (207, 19421), (215, 19442), (221, 19460), (222, 19466), (225, 19484), (240, 19526), (266, 19604), (270, 19613), (337, 19793), (349, 19835), (358, 19865), (364, 19895), (379, 19961), (389, 19985), (401, 20009), (409, 20027), (411, 20039), (417, 20072), (419, 20078), (436, 20129), (441, 20156), (455, 20207), (481, 20375), (489, 20414), (490, 20417), (502, 20474), (513, 20513), (521, 20534), (523, 20537), (526, 20549), (536, 20588), (560, 20735), (573, 20798),

Gene: Morkie_25 Start: 20143, Stop: 21978, Start Num: 36

Candidate Starts for Morkie_25:

(Start: 36 @20143 has 3 MA's), (82, 20287), (85, 20299), (Start: 101 @20332 has 1 MA's), (103, 20338), (119, 20362), (124, 20374), (154, 20419), (165, 20449), (167, 20455), (221, 20599), (222, 20605), (235, 20644), (238, 20656), (241, 20662), (255, 20716), (349, 20971), (350, 20974), (362, 21025), (369, 21061), (376, 21091), (379, 21097), (391, 21121), (400, 21133), (413, 21190), (417, 21208), (449, 21340), (450, 21346), (455, 21364), (484, 21532), (503, 21613), (515, 21655), (523, 21670), (543, 21751), (549, 21787), (571, 21886),

Gene: MortyNRick_28 Start: 21851, Stop: 23635, Start Num: 31

Candidate Starts for MortyNRick_28:

(Start: 31 @21851 has 22 MA's), (33, 21866), (44, 21893), (52, 21923), (82, 21995), (85, 22007), (119, 22070), (124, 22082), (150, 22124), (167, 22163), (171, 22172), (204, 22250), (221, 22307), (222,

22313), (230, 22334), (231, 22343), (238, 22364), (241, 22370), (285, 22472), (286, 22475), (302, 22505), (306, 22517), (321, 22541), (325, 22550), (349, 22616), (351, 22628), (362, 22670), (368, 22703), (376, 22736), (379, 22742), (391, 22766), (400, 22778), (413, 22835), (417, 22853), (449, 22985), (455, 23009), (458, 23027), (484, 23180), (487, 23195), (490, 23210), (491, 23216), (503, 23261), (508, 23279), (511, 23291), (513, 23297), (519, 23309), (523, 23318), (539, 23372), (551, 23441), (557, 23474), (559, 23480), (572, 23543), (573, 23546), (577, 23564), (582, 23585), (583, 23594),

Gene: Mutzi_35 Start: 28649, Stop: 30571, Start Num: 24

Candidate Starts for Mutzi_35:

(Start: 24 @28649 has 1 MA's), (46, 28772), (54, 28793), (71, 28841), (Start: 101 @28895 has 1 MA's), (118, 28916), (140, 28958), (173, 29039), (220, 29171), (221, 29174), (250, 29270), (255, 29291), (317, 29453), (349, 29546), (351, 29558), (362, 29606), (391, 29696), (400, 29708), (413, 29765), (417, 29783), (430, 29831), (449, 29915), (454, 29933), (464, 29981), (466, 29987), (484, 30107), (485, 30113), (543, 30338), (551, 30383), (570, 30464), (572, 30485),

Gene: NearlyHeadless_28 Start: 21529, Stop: 23250, Start Num: 64

Candidate Starts for NearlyHeadless_28:

(Start: 64 @21529 has 12 MA's), (136, 21673), (145, 21688), (187, 21787), (221, 21877), (230, 21913), (236, 21934), (256, 22006), (266, 22030), (280, 22084), (327, 22186), (356, 22282), (366, 22336), (375, 22384), (421, 22513), (427, 22531), (457, 22657), (491, 22861), (492, 22870), (514, 22948), (515, 22951), (542, 23047), (567, 23146), (585, 23233),

Gene: Neobush_28 Start: 22923, Stop: 24428, Start Num: 168

Candidate Starts for Neobush_28:

(Start: 168 @22923 has 29 MA's), (195, 22992), (199, 23004), (235, 23115), (238, 23127), (241, 23133), (268, 23220), (275, 23256), (276, 23262), (279, 23271), (376, 23565), (406, 23619), (407, 23622), (412, 23643), (422, 23688), (447, 23793), (467, 23877), (476, 23958), (477, 23961), (501, 24084), (532, 24180), (543, 24228), (553, 24288), (565, 24321), (568, 24327), (581, 24399),

Gene: Nettuno_24 Start: 19408, Stop: 20961, Start Num: 133

Candidate Starts for Nettuno_24:

(Start: 133 @19408 has 3 MA's), (166, 19477), (174, 19492), (194, 19534), (195, 19540), (221, 19624), (222, 19630), (230, 19651), (235, 19669), (239, 19681), (242, 19687), (304, 19843), (330, 19885), (358, 19978), (362, 19999), (376, 20065), (391, 20095), (400, 20107), (413, 20164), (449, 20314), (455, 20338), (484, 20506), (503, 20605), (508, 20623), (511, 20635), (560, 20812), (567, 20839), (574, 20878),

Gene: Netyap_20 Start: 19228, Stop: 21024, Start Num: 51

Candidate Starts for Netyap_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371, 20146), (390, 20203), (394, 20209), (418, 20293), (420, 20302), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (505, 20695), (513, 20722), (520, 20740), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: Neville_30 Start: 25504, Stop: 27090, Start Num: 92

Candidate Starts for Neville_30:

(Start: 92 @25504 has 5 MA's), (111, 25540), (179, 25684), (189, 25705), (190, 25708), (191, 25711), (196, 25735), (208, 25765), (210, 25768), (220, 25810), (221, 25813), (230, 25840), (231, 25849), (238, 25870), (241, 25876), (253, 25927), (255, 25930), (278, 25951), (302, 25993), (314, 26014), (317, 26017), (329, 26029), (349, 26095), (362, 26149), (369, 26185), (400, 26248), (408, 26272),

(412, 26290), (413, 26302), (417, 26320), (421, 26335), (449, 26452), (450, 26458), (455, 26476), (457, 26482), (458, 26494), (465, 26521), (478, 26620), (484, 26644), (487, 26659), (496, 26698), (503, 26725), (504, 26731), (508, 26743), (511, 26755), (513, 26761), (526, 26797), (541, 26851), (567, 26980), (571, 27007), (580, 27040),

Gene: Nicholasp3_20 Start: 19233, Stop: 21029, Start Num: 51

Candidate Starts for Nicholasp3_20:

(Start: 48 @19230 has 5 MA's), (Start: 51 @19233 has 26 MA's), (117, 19386), (127, 19410), (166, 19506), (170, 19515), (191, 19557), (192, 19560), (201, 19590), (211, 19617), (234, 19710), (243, 19734), (270, 19818), (280, 19863), (291, 19899), (340, 20019), (345, 20037), (350, 20052), (355, 20070), (356, 20073), (371, 20151), (390, 20208), (392, 20211), (394, 20214), (418, 20298), (420, 20307), (428, 20334), (456, 20445), (457, 20448), (484, 20616), (503, 20691), (505, 20700), (513, 20727), (525, 20760), (530, 20775), (534, 20790), (536, 20796), (551, 20874), (552, 20877), (566, 20925), (584, 21012),

Gene: Nordenberg_32 Start: 32866, Stop: 34788, Start Num: 26

Candidate Starts for Nordenberg_32:

(Start: 26 @32866 has 23 MA's), (60, 33001), (65, 33010), (82, 33043), (90, 33067), (124, 33136), (156, 33211), (221, 33403), (222, 33409), (230, 33430), (235, 33448), (238, 33460), (255, 33520), (275, 33574), (321, 33688), (349, 33775), (362, 33829), (376, 33895), (391, 33925), (400, 33937), (412, 33982), (413, 33994), (417, 34012), (425, 34039), (442, 34117), (449, 34144), (455, 34168), (476, 34291), (483, 34333), (503, 34417), (511, 34447), (523, 34474), (539, 34528), (545, 34558), (557, 34630), (560, 34639),

Gene: Nubi_33 Start: 28222, Stop: 30144, Start Num: 28

Candidate Starts for Nubi_33:

(Start: 28 @28222 has 17 MA's), (57, 28345), (65, 28366), (86, 28414), (138, 28522), (149, 28543), (182, 28624), (195, 28660), (197, 28663), (220, 28741), (221, 28744), (222, 28750), (230, 28771), (238, 28801), (241, 28807), (283, 28942), (315, 29029), (320, 29038), (323, 29044), (326, 29050), (349, 29125), (358, 29158), (362, 29179), (379, 29251), (391, 29275), (400, 29287), (413, 29344), (449, 29494), (455, 29518), (484, 29686), (487, 29701), (511, 29797), (543, 29908), (549, 29944),

Gene: Nymphadora_26 Start: 22926, Stop: 24431, Start Num: 168

Candidate Starts for Nymphadora_26:

(43, 22611), (Start: 81 @22719 has 1 MA's), (111, 22788), (113, 22791), (124, 22815), (125, 22821), (Start: 168 @22926 has 29 MA's), (195, 22995), (199, 23007), (235, 23118), (237, 23124), (238, 23130), (241, 23136), (268, 23223), (275, 23259), (276, 23265), (279, 23274), (376, 23568), (406, 23622), (407, 23625), (412, 23646), (422, 23691), (447, 23796), (467, 23880), (476, 23961), (477, 23964), (532, 24183), (543, 24231), (553, 24291), (565, 24324), (568, 24330), (581, 24402),

Gene: ODay_33 Start: 23997, Stop: 25781, Start Num: 31

Candidate Starts for ODay_33:

(Start: 31 @23997 has 22 MA's), (52, 24069), (82, 24141), (85, 24153), (108, 24198), (124, 24228), (150, 24270), (154, 24273), (167, 24309), (171, 24318), (182, 24333), (187, 24342), (204, 24396), (216, 24432), (221, 24453), (222, 24459), (230, 24480), (231, 24489), (238, 24510), (241, 24516), (285, 24618), (286, 24621), (302, 24651), (306, 24663), (321, 24687), (349, 24762), (351, 24774), (362, 24816), (368, 24849), (376, 24882), (379, 24888), (391, 24912), (400, 24924), (413, 24981), (417, 24999), (449, 25131), (455, 25155), (458, 25173), (484, 25326), (487, 25341), (490, 25356), (491, 25362), (503, 25407), (508, 25425), (511, 25437), (513, 25443), (519, 25455), (523, 25464), (539, 25518), (543, 25542), (551, 25587), (557, 25620), (559, 25626), (572, 25689), (573, 25692), (577, 25710), (582, 25731), (583, 25740),

Gene: Ohgeesy_26 Start: 22549, Stop: 24054, Start Num: 168

Candidate Starts for Ohgeesy_26:

(43, 22234), (Start: 81 @22342 has 1 MA's), (111, 22411), (113, 22414), (124, 22438), (125, 22444), (Start: 168 @22549 has 29 MA's), (195, 22618), (199, 22630), (235, 22741), (237, 22747), (238, 22753), (241, 22759), (268, 22846), (275, 22882), (276, 22888), (279, 22897), (376, 23191), (406, 23245), (407, 23248), (412, 23269), (422, 23314), (447, 23419), (467, 23503), (476, 23584), (477, 23587), (532, 23806), (543, 23854), (553, 23914), (565, 23947), (568, 23953), (581, 24025),

Gene: OneDirection_23 Start: 19380, Stop: 20984, Start Num: 134

Candidate Starts for OneDirection_23:

(Start: 134 @19380 has 5 MA's), (166, 19449), (174, 19464), (195, 19512), (222, 19602), (230, 19623), (235, 19641), (250, 19692), (255, 19713), (261, 19725), (329, 19911), (349, 19977), (350, 19980), (358, 20010), (385, 20109), (391, 20121), (400, 20133), (413, 20190), (423, 20229), (449, 20340), (460, 20391), (462, 20397), (484, 20532), (491, 20568), (503, 20613), (511, 20643), (513, 20649), (539, 20724), (543, 20748), (551, 20793), (557, 20826), (560, 20835), (573, 20898),

Gene: Orchid_27 Start: 31352, Stop: 33037, Start Num: 104

Candidate Starts for Orchid_27:

(Start: 104 @31352 has 5 MA's), (136, 31415), (155, 31460), (170, 31496), (Start: 184 @31526 has 1 MA's), (262, 31775), (287, 31868), (319, 31937), (340, 31994), (343, 32000), (348, 32021), (353, 32039), (367, 32102), (437, 32330), (455, 32411), (468, 32477), (482, 32588), (500, 32681), (507, 32702), (560, 32900), (569, 32933),

Gene: OverPar_20 Start: 19260, Stop: 21056, Start Num: 51

Candidate Starts for OverPar_20:

(Start: 48 @19257 has 5 MA's), (Start: 51 @19260 has 26 MA's), (117, 19413), (127, 19437), (166, 19533), (170, 19542), (192, 19587), (201, 19617), (211, 19644), (234, 19737), (243, 19761), (270, 19845), (280, 19890), (345, 20064), (350, 20079), (355, 20097), (356, 20100), (371, 20178), (390, 20235), (394, 20241), (418, 20325), (420, 20334), (456, 20472), (457, 20475), (484, 20643), (503, 20718), (505, 20727), (513, 20754), (525, 20787), (530, 20802), (534, 20817), (536, 20823), (551, 20901), (552, 20904), (584, 21039),

Gene: PP_40 Start: 28396, Stop: 30327, Start Num: 19

Candidate Starts for PP_40:

(Start: 19 @28396 has 2 MA's), (27, 28447), (42, 28516), (47, 28543), (61, 28585), (76, 28618), (97, 28666), (143, 28756), (148, 28765), (157, 28792), (166, 28813), (198, 28864), (205, 28885), (214, 28906), (215, 28909), (236, 28972), (252, 29038), (280, 29122), (344, 29281), (350, 29305), (357, 29326), (363, 29359), (371, 29398), (372, 29407), (426, 29569), (429, 29581), (431, 29593), (456, 29689), (491, 29893), (506, 29956), (510, 29971), (528, 30022), (534, 30043), (546, 30091), (567, 30178), (577, 30232), (578, 30238), (582, 30265),

Gene: PantheRoc_27 Start: 22121, Stop: 23626, Start Num: 168

Candidate Starts for PantheRoc_27:

(Start: 81 @21914 has 1 MA's), (111, 21983), (113, 21986), (124, 22010), (125, 22016), (Start: 168 @22121 has 29 MA's), (195, 22190), (199, 22202), (235, 22313), (238, 22325), (241, 22331), (268, 22418), (275, 22454), (276, 22460), (279, 22469), (376, 22763), (406, 22817), (407, 22820), (412, 22841), (422, 22886), (447, 22991), (467, 23075), (476, 23156), (477, 23159), (532, 23378), (543, 23426), (553, 23486), (565, 23519), (568, 23525), (581, 23597),

Gene: Paries_40 Start: 34332, Stop: 36257, Start Num: 26

Candidate Starts for Paries_40:

(Start: 26 @34332 has 23 MA's), (60, 34467), (65, 34476), (82, 34509), (90, 34533), (124, 34602), (156, 34677), (221, 34869), (222, 34875), (230, 34896), (235, 34914), (238, 34926), (255, 34986), (275, 35040), (321, 35157), (349, 35244), (362, 35298), (373, 35352), (376, 35364), (391, 35394),

(400, 35406), (412, 35451), (413, 35463), (417, 35481), (425, 35508), (442, 35586), (449, 35613), (455, 35637), (476, 35760), (483, 35802), (503, 35886), (511, 35916), (523, 35943), (539, 35997), (545, 36027), (557, 36099), (560, 36108),

Gene: PatrickStar_27 Start: 31352, Stop: 33037, Start Num: 104

Candidate Starts for PatrickStar_27:

(Start: 104 @31352 has 5 MA's), (136, 31415), (155, 31460), (170, 31496), (Start: 184 @31526 has 1 MA's), (262, 31775), (287, 31868), (319, 31937), (340, 31994), (343, 32000), (348, 32021), (353, 32039), (367, 32102), (437, 32330), (455, 32411), (468, 32477), (482, 32588), (500, 32681), (507, 32702), (560, 32900), (569, 32933),

Gene: Pepperoni_25 Start: 20244, Stop: 21851, Start Num: 134

Candidate Starts for Pepperoni_25:

(40, 20010), (43, 20025), (52, 20061), (66, 20106), (67, 20109), (Start: 134 @20244 has 5 MA's), (173, 20331), (221, 20463), (222, 20469), (230, 20490), (235, 20508), (250, 20559), (255, 20580), (261, 20592), (329, 20778), (349, 20844), (350, 20847), (358, 20877), (385, 20976), (391, 20988), (400, 21000), (413, 21057), (423, 21096), (449, 21207), (460, 21258), (462, 21264), (484, 21399), (491, 21435), (503, 21480), (511, 21510), (513, 21516), (539, 21591), (543, 21615), (546, 21624), (551, 21660), (557, 21693), (560, 21702), (573, 21765),

Gene: Periwinkle_31 Start: 22588, Stop: 24423, Start Num: 31

Candidate Starts for Periwinkle_31:

(Start: 31 @22588 has 22 MA's), (Start: 79 @22750 has 1 MA's), (91, 22780), (116, 22834), (124, 22849), (Start: 128 @22861 has 1 MA's), (129, 22864), (140, 22879), (142, 22882), (144, 22885), (182, 22975), (187, 22984), (189, 22987), (216, 23074), (221, 23095), (222, 23101), (230, 23122), (231, 23131), (238, 23152), (241, 23158), (285, 23260), (286, 23263), (302, 23293), (306, 23305), (321, 23329), (325, 23338), (349, 23404), (351, 23416), (362, 23458), (368, 23491), (376, 23524), (379, 23530), (391, 23554), (400, 23566), (413, 23623), (417, 23641), (449, 23773), (455, 23797), (458, 23815), (484, 23968), (487, 23983), (490, 23998), (491, 24004), (503, 24049), (508, 24067), (511, 24079), (513, 24085), (519, 24097), (523, 24106), (539, 24160), (551, 24229), (557, 24262), (559, 24268), (572, 24331), (573, 24334), (577, 24352), (582, 24373), (583, 24382),

Gene: Phabuloso_28 Start: 21875, Stop: 23710, Start Num: 31

Candidate Starts for Phabuloso_28:

(Start: 31 @21875 has 22 MA's), (Start: 79 @22037 has 1 MA's), (91, 22067), (116, 22121), (124, 22136), (Start: 128 @22148 has 1 MA's), (129, 22151), (140, 22166), (142, 22169), (144, 22172), (182, 22262), (187, 22271), (189, 22274), (216, 22361), (221, 22382), (222, 22388), (230, 22409), (231, 22418), (238, 22439), (241, 22445), (285, 22547), (286, 22550), (302, 22580), (306, 22592), (321, 22616), (349, 22691), (351, 22703), (362, 22745), (368, 22778), (376, 22811), (379, 22817), (391, 22841), (400, 22853), (413, 22910), (417, 22928), (449, 23060), (455, 23084), (458, 23102), (484, 23255), (487, 23270), (490, 23285), (491, 23291), (503, 23336), (508, 23354), (511, 23366), (513, 23372), (519, 23384), (523, 23393), (539, 23447), (551, 23516), (557, 23549), (559, 23555), (572, 23618), (573, 23621), (577, 23639), (582, 23660), (583, 23669),

Gene: Phendrix_89 Start: 54539, Stop: 56233, Start Num: 72

Candidate Starts for Phendrix_89:

(Start: 72 @54539 has 5 MA's), (83, 54557), (84, 54563), (129, 54653), (Start: 133 @54659 has 3 MA's), (Start: 135 @54662 has 1 MA's), (154, 54683), (209, 54836), (211, 54839), (220, 54878), (248, 54974), (250, 54977), (261, 55010), (294, 55115), (326, 55166), (349, 55241), (362, 55295), (369, 55331), (386, 55373), (395, 55388), (449, 55598), (455, 55622), (476, 55754), (490, 55826), (493, 55844), (512, 55916), (525, 55949), (527, 55955), (531, 55973),

Gene: Phillis_28 Start: 21576, Stop: 23297, Start Num: 64

Candidate Starts for Phillis_28:

(Start: 64 @21576 has 12 MA's), (131, 21711), (136, 21720), (145, 21735), (187, 21834), (221, 21924), (230, 21960), (236, 21981), (256, 22053), (266, 22077), (280, 22131), (286, 22149), (291, 22167), (327, 22233), (356, 22329), (366, 22383), (415, 22542), (427, 22578), (457, 22704), (491, 22908), (492, 22917), (515, 22998), (542, 23094), (567, 23193),

Gene: Phistory_30 Start: 22909, Stop: 24744, Start Num: 31

Candidate Starts for Phistory_30:

(Start: 31 @22909 has 22 MA's), (Start: 79 @23071 has 1 MA's), (91, 23101), (116, 23155), (124, 23170), (Start: 128 @23182 has 1 MA's), (129, 23185), (140, 23200), (142, 23203), (144, 23206), (182, 23296), (187, 23305), (189, 23308), (216, 23395), (221, 23416), (222, 23422), (230, 23443), (231, 23452), (238, 23473), (241, 23479), (285, 23581), (286, 23584), (302, 23614), (306, 23626), (321, 23650), (325, 23659), (349, 23725), (351, 23737), (362, 23779), (368, 23812), (376, 23845), (379, 23851), (391, 23875), (400, 23887), (413, 23944), (417, 23962), (449, 24094), (455, 24118), (458, 24136), (484, 24289), (487, 24304), (490, 24319), (491, 24325), (503, 24370), (508, 24388), (511, 24400), (513, 24406), (519, 24418), (523, 24427), (539, 24481), (551, 24550), (557, 24583), (559, 24589), (572, 24652), (573, 24655), (577, 24673), (582, 24694), (583, 24703),

Gene: Phlop_33 Start: 28304, Stop: 30226, Start Num: 28

Candidate Starts for Phlop_33:

(Start: 28 @28304 has 17 MA's), (57, 28427), (65, 28448), (86, 28496), (138, 28604), (149, 28625), (182, 28706), (195, 28742), (197, 28745), (220, 28823), (221, 28826), (222, 28832), (230, 28853), (238, 28883), (241, 28889), (283, 29024), (315, 29111), (320, 29120), (323, 29126), (326, 29132), (349, 29207), (358, 29240), (362, 29261), (379, 29333), (391, 29357), (400, 29369), (413, 29426), (449, 29576), (455, 29600), (484, 29768), (487, 29783), (511, 29879), (543, 29990), (549, 30026),

Gene: PhorbesPhlower_25 Start: 20143, Stop: 21978, Start Num: 36

Candidate Starts for PhorbesPhlower_25:

(Start: 36 @20143 has 3 MA's), (82, 20287), (85, 20299), (Start: 101 @20332 has 1 MA's), (103, 20338), (119, 20362), (124, 20374), (154, 20419), (165, 20449), (167, 20455), (221, 20599), (222, 20605), (235, 20644), (238, 20656), (241, 20662), (255, 20716), (349, 20971), (350, 20974), (362, 21025), (369, 21061), (376, 21091), (379, 21097), (391, 21121), (400, 21133), (413, 21190), (417, 21208), (449, 21340), (450, 21346), (455, 21364), (484, 21532), (503, 21613), (515, 21655), (523, 21670), (543, 21751), (549, 21787), (571, 21886),

Gene: Pickett_24 Start: 19332, Stop: 20870, Start Num: 135

Candidate Starts for Pickett_24:

(Start: 135 @19332 has 1 MA's), (166, 19401), (174, 19416), (178, 19422), (195, 19464), (222, 19554), (230, 19575), (238, 19605), (285, 19713), (286, 19716), (302, 19746), (306, 19758), (330, 19797), (351, 19869), (358, 19890), (362, 19911), (391, 20007), (400, 20019), (413, 20076), (417, 20094), (419, 20100), (428, 20133), (449, 20226), (455, 20250), (483, 20415), (484, 20418), (551, 20679), (582, 20823),

Gene: Pollux_28 Start: 22623, Stop: 24575, Start Num: 18

Candidate Starts for Pollux_28:

(1, 22335), (3, 22392), (4, 22407), (6, 22443), (7, 22488), (8, 22491), (Start: 18 @22623 has 8 MA's), (23, 22638), (Start: 26 @22677 has 23 MA's), (Start: 28 @22680 has 17 MA's), (106, 22908), (122, 22935), (Start: 128 @22950 has 1 MA's), (221, 23184), (222, 23190), (226, 23202), (250, 23280), (255, 23301), (296, 23421), (317, 23463), (349, 23556), (351, 23568), (362, 23610), (391, 23700), (400, 23712), (413, 23769), (421, 23802), (430, 23835), (444, 23895), (449, 23919), (454, 23937), (484, 24111), (485, 24117), (495, 24165), (551, 24387), (570, 24468), (572, 24489),

Gene: Polly_25 Start: 22366, Stop: 23871, Start Num: 168

Candidate Starts for Polly_25:

(Start: 168 @22366 has 29 MA's), (195, 22435), (199, 22447), (235, 22558), (238, 22570), (241, 22576), (268, 22663), (275, 22699), (276, 22705), (279, 22714), (376, 23008), (406, 23062), (407, 23065), (412, 23086), (422, 23131), (447, 23236), (467, 23320), (476, 23401), (477, 23404), (501, 23527), (532, 23623), (543, 23671), (553, 23731), (565, 23764), (568, 23770), (581, 23842),

Gene: Powerball_24 Start: 20546, Stop: 22255, Start Num: 87

Candidate Starts for Powerball_24:

(Start: 87 @20546 has 4 MA's), (112, 20594), (115, 20603), (173, 20729), (178, 20738), (182, 20744), (189, 20756), (191, 20762), (195, 20780), (197, 20783), (220, 20861), (221, 20864), (222, 20870), (230, 20891), (235, 20909), (238, 20921), (258, 20987), (265, 21002), (277, 21059), (294, 21113), (298, 21119), (323, 21170), (326, 21176), (329, 21185), (339, 21221), (349, 21251), (350, 21254), (362, 21305), (370, 21341), (373, 21359), (391, 21392), (393, 21395), (412, 21449), (413, 21461), (417, 21479), (449, 21611), (455, 21635), (471, 21716), (483, 21800), (484, 21803), (487, 21818), (489, 21830), (490, 21833), (493, 21851), (511, 21914), (513, 21920), (543, 22022), (569, 22136), (572, 22163),

Gene: PullumCavea_33 Start: 28304, Stop: 30226, Start Num: 28

Candidate Starts for PullumCavea_33:

(Start: 28 @28304 has 17 MA's), (57, 28427), (65, 28448), (86, 28496), (138, 28604), (149, 28625), (182, 28706), (195, 28742), (197, 28745), (220, 28823), (221, 28826), (222, 28832), (230, 28853), (238, 28883), (241, 28889), (283, 29024), (315, 29111), (320, 29120), (323, 29126), (326, 29132), (349, 29207), (358, 29240), (362, 29261), (379, 29333), (391, 29357), (400, 29369), (413, 29426), (449, 29576), (455, 29600), (484, 29768), (487, 29783), (511, 29879), (543, 29990), (549, 30026),

Gene: Rabbitrun_32 Start: 25825, Stop: 27402, Start Num: 95

Candidate Starts for Rabbitrun_32:

(Start: 92 @25816 has 5 MA's), (Start: 95 @25825 has 1 MA's), (107, 25846), (120, 25873), (189, 26017), (190, 26020), (196, 26044), (220, 26119), (221, 26122), (230, 26149), (238, 26179), (241, 26185), (250, 26218), (253, 26236), (278, 26266), (304, 26314), (305, 26317), (314, 26332), (318, 26338), (339, 26383), (350, 26416), (364, 26476), (369, 26503), (397, 26563), (400, 26566), (412, 26608), (413, 26620), (418, 26641), (419, 26644), (421, 26653), (428, 26677), (449, 26770), (450, 26776), (457, 26800), (458, 26812), (461, 26824), (476, 26917), (478, 26938), (484, 26962), (487, 26977), (491, 26998), (496, 27016), (503, 27043), (504, 27049), (508, 27061), (513, 27079), (529, 27124), (538, 27163), (547, 27196), (553, 27244), (562, 27277), (567, 27295), (573, 27331), (582, 27367), (587, 27391),

Gene: Reyja_26 Start: 19864, Stop: 21561, Start Num: 79

Candidate Starts for Reyja_26:

(Start: 79 @19864 has 1 MA's), (129, 19963), (173, 20059), (182, 20074), (221, 20194), (222, 20200), (230, 20221), (242, 20257), (250, 20290), (255, 20311), (273, 20359), (298, 20428), (318, 20464), (321, 20467), (349, 20548), (362, 20602), (385, 20683), (391, 20695), (400, 20707), (410, 20743), (413, 20764), (417, 20782), (421, 20797), (449, 20914), (455, 20938), (484, 21109), (508, 21226), (511, 21238), (513, 21244), (523, 21265), (559, 21412), (567, 21442), (574, 21481),

Gene: Ribeye_37 Start: 33113, Stop: 34834, Start Num: 98

Candidate Starts for Ribeye_37:

(Start: 98 @33113 has 30 MA's), (155, 33236), (160, 33248), (188, 33314), (210, 33383), (218, 33419), (281, 33644), (293, 33683), (316, 33743), (332, 33788), (349, 33848), (383, 33983), (386, 33989), (406, 34031), (410, 34046), (416, 34082), (424, 34103), (447, 34202), (467, 34286), (471, 34319), (476, 34364), (477, 34367), (484, 34403), (491, 34439), (493, 34451), (504, 34487), (515, 34523), (533, 34577),

Gene: RiverRaider_37 Start: 31407, Stop: 33125, Start Num: 98

Candidate Starts for RiverRaider_37:

(Start: 98 @31407 has 30 MA's), (160, 31542), (188, 31608), (210, 31677), (218, 31713), (228, 31752), (263, 31866), (281, 31938), (293, 31977), (297, 31986), (324, 32052), (326, 32058), (376, 32271), (383, 32277), (386, 32283), (406, 32325), (410, 32340), (412, 32349), (447, 32493), (454, 32520), (467, 32577), (474, 32634), (476, 32655), (484, 32694), (491, 32730), (493, 32742), (497, 32757), (503, 32772), (533, 32868),

Gene: Roary_28 Start: 21475, Stop: 23196, Start Num: 64

Candidate Starts for Roary_28:

(Start: 64 @21475 has 12 MA's), (136, 21619), (145, 21634), (187, 21733), (230, 21859), (236, 21880), (256, 21952), (266, 21976), (280, 22030), (327, 22132), (356, 22228), (366, 22282), (375, 22330), (427, 22477), (457, 22603), (491, 22807), (492, 22816), (515, 22897), (542, 22993), (567, 23092), (585, 23179),

Gene: RobinSparkles_30 Start: 32266, Stop: 33954, Start Num: 104

Candidate Starts for RobinSparkles_30:

(Start: 104 @32266 has 5 MA's), (136, 32329), (170, 32410), (Start: 184 @32440 has 1 MA's), (277, 32755), (340, 32911), (343, 32917), (348, 32938), (353, 32956), (367, 33019), (437, 33247), (452, 33316), (455, 33328), (468, 33394), (482, 33505), (500, 33598), (507, 33619), (560, 33817), (569, 33850),

Gene: Rofo_38 Start: 33730, Stop: 35583, Start Num: 26

Candidate Starts for Rofo_38:

(Start: 26 @33730 has 23 MA's), (60, 33865), (65, 33874), (82, 33907), (90, 33931), (124, 34000), (138, 34030), (156, 34075), (221, 34267), (222, 34273), (230, 34294), (235, 34312), (238, 34324), (255, 34384), (295, 34450), (349, 34570), (358, 34603), (376, 34690), (391, 34720), (400, 34732), (412, 34777), (413, 34789), (417, 34807), (421, 34822), (428, 34846), (442, 34912), (449, 34939), (455, 34963), (476, 35086), (483, 35128), (503, 35212), (511, 35242), (523, 35269), (539, 35323), (545, 35353), (557, 35425), (560, 35434),

Gene: Rossetti_20 Start: 19247, Stop: 21043, Start Num: 51

Candidate Starts for Rossetti_20:

(Start: 48 @19244 has 5 MA's), (Start: 51 @19247 has 26 MA's), (89, 19343), (100, 19367), (111, 19388), (117, 19400), (127, 19424), (141, 19451), (166, 19520), (170, 19529), (201, 19604), (211, 19631), (234, 19724), (243, 19748), (270, 19832), (280, 19877), (340, 20033), (345, 20051), (350, 20066), (355, 20084), (356, 20087), (371, 20165), (390, 20222), (392, 20225), (394, 20228), (418, 20312), (420, 20321), (456, 20459), (457, 20462), (471, 20537), (484, 20630), (503, 20705), (505, 20714), (525, 20774), (530, 20789), (534, 20804), (536, 20810), (551, 20888), (552, 20891), (566, 20939), (575, 20990), (584, 21026),

Gene: Rumpelstiltskin_20 Start: 19231, Stop: 21030, Start Num: 48

Candidate Starts for Rumpelstiltskin_20:

(Start: 48 @19231 has 5 MA's), (Start: 51 @19234 has 26 MA's), (117, 19387), (127, 19411), (166, 19507), (170, 19516), (192, 19561), (201, 19591), (211, 19618), (234, 19711), (243, 19735), (270, 19819), (280, 19864), (340, 20020), (345, 20038), (350, 20053), (355, 20071), (356, 20074), (371, 20152), (390, 20209), (392, 20212), (394, 20215), (418, 20299), (420, 20308), (428, 20335), (456, 20446), (457, 20449), (484, 20617), (503, 20692), (505, 20701), (513, 20728), (525, 20761), (530, 20776), (534, 20791), (536, 20797), (551, 20875), (552, 20878), (566, 20926), (584, 21013),

Gene: Sahara_24 Start: 20177, Stop: 21700, Start Num: 169

Candidate Starts for Sahara_24:

(Start: 169 @20177 has 19 MA's), (207, 20249), (212, 20261), (221, 20288), (225, 20312), (266, 20432), (270, 20441), (286, 20507), (337, 20621), (349, 20663), (358, 20693), (364, 20723), (379, 20789), (389, 20813), (401, 20837), (409, 20855), (411, 20867), (414, 20885), (417, 20900), (419, 20906), (436, 20957), (441, 20984), (455, 21035), (481, 21203), (513, 21341), (521, 21362), (523, 21365), (526, 21377), (536, 21416), (560, 21563), (572, 21623), (573, 21626),

Gene: Saintus_28 Start: 21494, Stop: 23215, Start Num: 64

Candidate Starts for Saintus_28:

(Start: 64 @21494 has 12 MA's), (136, 21638), (145, 21653), (187, 21752), (221, 21842), (230, 21878), (236, 21899), (256, 21971), (266, 21995), (280, 22049), (327, 22151), (356, 22247), (366, 22301), (375, 22349), (421, 22478), (427, 22496), (457, 22622), (491, 22826), (492, 22835), (515, 22916), (542, 23012), (567, 23111), (585, 23198),

Gene: Salvador_33 Start: 28218, Stop: 30140, Start Num: 28

Candidate Starts for Salvador_33:

(Start: 28 @28218 has 17 MA's), (57, 28341), (65, 28362), (86, 28410), (138, 28518), (149, 28539), (182, 28620), (195, 28656), (197, 28659), (220, 28737), (221, 28740), (222, 28746), (230, 28767), (238, 28797), (241, 28803), (283, 28938), (315, 29025), (320, 29034), (323, 29040), (326, 29046), (358, 29154), (362, 29175), (379, 29247), (391, 29271), (400, 29283), (413, 29340), (449, 29490), (455, 29514), (484, 29682), (487, 29697), (511, 29793), (543, 29904), (549, 29940),

Gene: Sanjuju_35 Start: 33293, Stop: 35014, Start Num: 98

Candidate Starts for Sanjuju_35:

(Start: 98 @33293 has 30 MA's), (160, 33428), (162, 33437), (176, 33470), (188, 33494), (210, 33563), (228, 33638), (281, 33824), (293, 33863), (297, 33872), (326, 33944), (332, 33968), (351, 34040), (370, 34127), (383, 34163), (386, 34169), (406, 34211), (410, 34226), (412, 34235), (447, 34382), (467, 34466), (471, 34499), (477, 34547), (490, 34613), (491, 34619), (493, 34631), (503, 34661), (504, 34667), (515, 34703), (519, 34712), (533, 34757),

Gene: Santhid_25 Start: 19699, Stop: 21399, Start Num: 80

Candidate Starts for Santhid_25:

(Start: 80 @19699 has 2 MA's), (129, 19798), (173, 19894), (182, 19909), (185, 19915), (220, 20026), (221, 20029), (222, 20035), (230, 20056), (235, 20074), (242, 20092), (250, 20125), (255, 20146), (273, 20194), (298, 20263), (318, 20299), (321, 20302), (349, 20383), (351, 20395), (362, 20437), (385, 20518), (386, 20521), (391, 20530), (400, 20542), (410, 20578), (413, 20599), (417, 20617), (421, 20632), (449, 20749), (455, 20773), (484, 20944), (503, 21043), (508, 21061), (511, 21073), (513, 21079), (523, 21100), (567, 21277), (574, 21316),

Gene: Saronaya_36 Start: 31956, Stop: 33677, Start Num: 98

Candidate Starts for Saronaya_36:

(Start: 98 @31956 has 30 MA's), (155, 32079), (160, 32091), (188, 32157), (210, 32226), (218, 32262), (228, 32301), (281, 32487), (293, 32526), (316, 32586), (332, 32631), (349, 32691), (383, 32826), (386, 32832), (406, 32874), (410, 32889), (416, 32925), (424, 32946), (447, 33045), (467, 33129), (471, 33162), (476, 33207), (477, 33210), (484, 33246), (491, 33282), (493, 33294), (504, 33330), (515, 33366), (533, 33420),

Gene: Sarshaun_20 Start: 19261, Stop: 21057, Start Num: 51

Candidate Starts for Sarshaun_20:

(Start: 48 @19258 has 5 MA's), (Start: 51 @19261 has 26 MA's), (117, 19414), (127, 19438), (166, 19534), (170, 19543), (191, 19585), (192, 19588), (201, 19618), (211, 19645), (234, 19738), (243, 19762), (270, 19846), (280, 19891), (291, 19927), (340, 20047), (345, 20065), (350, 20080), (355, 20098), (356, 20101), (371, 20179), (390, 20236), (392, 20239), (394, 20242), (418, 20326), (420, 20335), (428, 20362), (456, 20473), (457, 20476), (484, 20644), (503, 20719), (505, 20728), (513,

20755), (525, 20788), (530, 20803), (534, 20818), (536, 20824), (551, 20902), (552, 20905), (584, 21040),

Gene: Savage_25 Start: 20505, Stop: 22028, Start Num: 169

Candidate Starts for Savage_25:

(Start: 169 @20505 has 19 MA's), (207, 20577), (212, 20589), (221, 20616), (222, 20622), (225, 20640), (266, 20760), (270, 20769), (286, 20835), (337, 20949), (349, 20991), (358, 21021), (364, 21051), (376, 21111), (379, 21117), (389, 21141), (401, 21165), (409, 21183), (411, 21195), (414, 21213), (417, 21228), (419, 21234), (436, 21285), (441, 21312), (455, 21363), (481, 21531), (513, 21669), (521, 21690), (523, 21693), (526, 21705), (536, 21744), (560, 21891), (572, 21951), (573, 21954),

Gene: Savbucketdawg_33 Start: 27999, Stop: 29921, Start Num: 28

Candidate Starts for Savbucketdawg_33:

(Start: 28 @27999 has 17 MA's), (57, 28122), (65, 28143), (86, 28191), (138, 28299), (149, 28320), (182, 28401), (195, 28437), (197, 28440), (220, 28518), (221, 28521), (222, 28527), (230, 28548), (238, 28578), (241, 28584), (283, 28719), (315, 28806), (320, 28815), (323, 28821), (326, 28827), (349, 28902), (358, 28935), (362, 28956), (379, 29028), (391, 29052), (400, 29064), (413, 29121), (449, 29271), (455, 29295), (484, 29463), (487, 29478), (511, 29574), (543, 29685), (549, 29721),

Gene: Schmidt_27 Start: 20153, Stop: 21607, Start Num: 184

Candidate Starts for Schmidt_27:

(Start: 184 @20153 has 1 MA's), (189, 20165), (206, 20222), (213, 20240), (226, 20294), (245, 20360), (247, 20369), (267, 20420), (304, 20525), (308, 20534), (315, 20552), (333, 20567), (339, 20588), (349, 20618), (359, 20660), (362, 20672), (365, 20684), (367, 20693), (374, 20732), (395, 20762), (406, 20783), (412, 20807), (438, 20906), (448, 20963), (449, 20966), (486, 21170), (499, 21242), (509, 21275), (520, 21302), (524, 21314), (531, 21338), (535, 21353), (544, 21386), (572, 21524),

Gene: SchottB_35 Start: 32971, Stop: 34692, Start Num: 98

Candidate Starts for SchottB_35:

(Start: 98 @32971 has 30 MA's), (155, 33094), (160, 33106), (188, 33172), (210, 33241), (218, 33277), (281, 33502), (293, 33541), (316, 33601), (332, 33646), (349, 33706), (383, 33841), (386, 33847), (406, 33889), (410, 33904), (416, 33940), (424, 33961), (447, 34060), (467, 34144), (471, 34177), (476, 34222), (477, 34225), (484, 34261), (491, 34297), (493, 34309), (504, 34345), (515, 34381), (533, 34435),

Gene: Sedona_38 Start: 34836, Stop: 36758, Start Num: 26

Candidate Starts for Sedona_38:

(Start: 26 @34836 has 23 MA's), (60, 34971), (65, 34980), (82, 35013), (90, 35037), (124, 35106), (156, 35181), (221, 35373), (222, 35379), (230, 35400), (235, 35418), (238, 35430), (255, 35490), (275, 35544), (321, 35658), (349, 35745), (362, 35799), (376, 35865), (391, 35895), (400, 35907), (412, 35952), (413, 35964), (417, 35982), (425, 36009), (442, 36087), (449, 36114), (455, 36138), (476, 36261), (483, 36303), (503, 36387), (511, 36417), (523, 36444), (539, 36498), (545, 36528), (557, 36600), (560, 36609),

Gene: Sephiroth_30 Start: 24175, Stop: 25827, Start Num: 92

Candidate Starts for Sephiroth_30:

(Start: 92 @24175 has 5 MA's), (181, 24349), (Start: 184 @24355 has 1 MA's), (186, 24358), (191, 24373), (203, 24415), (210, 24427), (220, 24469), (221, 24472), (222, 24478), (226, 24490), (230, 24499), (235, 24517), (238, 24529), (241, 24535), (261, 24601), (268, 24616), (271, 24622), (317, 24757), (329, 24784), (330, 24790), (358, 24883), (400, 25003), (412, 25045), (413, 25057), (449, 25207), (455, 25231), (458, 25249), (471, 25312), (484, 25399), (487, 25414), (491, 25435), (503, 25480), (508, 25498), (514, 25519), (529, 25561), (534, 25585), (547, 25633), (562, 25708), (572,

25759), (586, 25822),

Gene: ShawBrad_29 Start: 22131, Stop: 23966, Start Num: 31

Candidate Starts for ShawBrad_29:

(Start: 31 @22131 has 22 MA's), (Start: 79 @22293 has 1 MA's), (91, 22323), (116, 22377), (124, 22392), (Start: 128 @22404 has 1 MA's), (129, 22407), (140, 22422), (142, 22425), (144, 22428), (182, 22518), (187, 22527), (189, 22530), (216, 22617), (221, 22638), (222, 22644), (230, 22665), (231, 22674), (238, 22695), (241, 22701), (285, 22803), (286, 22806), (302, 22836), (306, 22848), (321, 22872), (349, 22947), (351, 22959), (362, 23001), (368, 23034), (376, 23067), (379, 23073), (391, 23097), (400, 23109), (413, 23166), (417, 23184), (449, 23316), (455, 23340), (458, 23358), (484, 23511), (487, 23526), (490, 23541), (491, 23547), (503, 23592), (508, 23610), (511, 23622), (513, 23628), (519, 23640), (523, 23649), (539, 23703), (543, 23727), (551, 23772), (557, 23805), (559, 23811), (572, 23874), (573, 23877), (577, 23895), (582, 23916), (583, 23925),

Gene: Shivanishola_38 Start: 33192, Stop: 35114, Start Num: 26

Candidate Starts for Shivanishola_38:

(Start: 26 @33192 has 23 MA's), (60, 33327), (65, 33336), (82, 33369), (90, 33393), (124, 33462), (138, 33492), (156, 33537), (221, 33729), (222, 33735), (230, 33756), (235, 33774), (238, 33786), (255, 33846), (275, 33900), (321, 34014), (349, 34101), (362, 34155), (376, 34221), (391, 34251), (400, 34263), (412, 34308), (413, 34320), (417, 34338), (425, 34365), (442, 34443), (449, 34470), (455, 34494), (476, 34617), (483, 34659), (503, 34743), (511, 34773), (539, 34854), (545, 34884), (557, 34956), (560, 34965),

Gene: Sidious_27 Start: 22956, Stop: 24578, Start Num: 130

Candidate Starts for Sidious_27:

(55, 22788), (Start: 130 @22956 has 1 MA's), (162, 23034), (208, 23130), (215, 23148), (221, 23166), (226, 23193), (235, 23217), (266, 23310), (337, 23499), (349, 23541), (358, 23571), (364, 23601), (379, 23667), (389, 23691), (401, 23715), (411, 23745), (417, 23778), (419, 23784), (435, 23832), (436, 23835), (441, 23862), (455, 23913), (481, 24081), (490, 24123), (502, 24180), (513, 24219), (521, 24240), (523, 24243), (526, 24255), (536, 24294), (545, 24333), (554, 24402), (573, 24504),

Gene: Sitar_38 Start: 34887, Stop: 36809, Start Num: 26

Candidate Starts for Sitar_38:

(Start: 26 @34887 has 23 MA's), (60, 35022), (65, 35031), (82, 35064), (90, 35088), (124, 35157), (156, 35232), (221, 35424), (222, 35430), (230, 35451), (235, 35469), (238, 35481), (255, 35541), (275, 35595), (321, 35709), (349, 35796), (362, 35850), (373, 35904), (376, 35916), (391, 35946), (400, 35958), (412, 36003), (413, 36015), (417, 36033), (425, 36060), (442, 36138), (449, 36165), (455, 36189), (476, 36312), (483, 36354), (503, 36438), (511, 36468), (539, 36549), (545, 36579), (557, 36651), (560, 36660),

Gene: Sixama_102 Start: 61915, Stop: 63603, Start Num: 74

Candidate Starts for Sixama_102:

(61, 61888), (Start: 64 @61894 has 12 MA's), (70, 61909), (Start: 74 @61915 has 1 MA's), (Start: 93 @61957 has 1 MA's), (Start: 133 @62032 has 3 MA's), (Start: 135 @62035 has 1 MA's), (154, 62056), (155, 62068), (219, 62248), (235, 62299), (248, 62347), (326, 62539), (449, 62971), (455, 62995), (485, 63175), (486, 63178), (490, 63199), (515, 63298), (541, 63376), (556, 63457),

Gene: Smeadley_28 Start: 21508, Stop: 23229, Start Num: 64

Candidate Starts for Smeadley_28:

(Start: 64 @21508 has 12 MA's), (136, 21652), (145, 21667), (187, 21766), (221, 21856), (230, 21892), (236, 21913), (256, 21985), (266, 22009), (280, 22063), (327, 22165), (356, 22261), (366, 22315), (375, 22363), (421, 22492), (427, 22510), (457, 22636), (491, 22840), (492, 22849), (515, 22930), (542, 23026), (567, 23125), (585, 23212),

Gene: SmokingBunny_33 Start: 28209, Stop: 30131, Start Num: 28

Candidate Starts for SmokingBunny_33:

(Start: 28 @28209 has 17 MA's), (57, 28332), (65, 28353), (86, 28401), (138, 28509), (149, 28530), (182, 28611), (195, 28647), (197, 28650), (220, 28728), (221, 28731), (222, 28737), (230, 28758), (238, 28788), (241, 28794), (283, 28929), (315, 29016), (320, 29025), (323, 29031), (326, 29037), (349, 29112), (358, 29145), (362, 29166), (379, 29238), (391, 29262), (400, 29274), (413, 29331), (449, 29481), (455, 29505), (484, 29673), (487, 29688), (511, 29784), (543, 29895), (549, 29931),

Gene: SoJulia_20 Start: 19227, Stop: 21023, Start Num: 51

Candidate Starts for SoJulia_20:

(Start: 48 @19224 has 5 MA's), (Start: 51 @19227 has 26 MA's), (117, 19380), (127, 19404), (166, 19500), (170, 19509), (192, 19554), (201, 19584), (211, 19611), (234, 19704), (243, 19728), (270, 19812), (280, 19857), (340, 20013), (345, 20031), (350, 20046), (355, 20064), (356, 20067), (371, 20145), (390, 20202), (394, 20208), (418, 20292), (420, 20301), (456, 20439), (457, 20442), (484, 20610), (503, 20685), (505, 20694), (513, 20721), (520, 20739), (525, 20754), (530, 20769), (534, 20784), (536, 20790), (551, 20868), (552, 20871), (566, 20919), (584, 21006),

Gene: Soap141_20 Start: 19261, Stop: 21057, Start Num: 51

Candidate Starts for Soap141_20:

(Start: 48 @19258 has 5 MA's), (Start: 51 @19261 has 26 MA's), (117, 19414), (127, 19438), (166, 19534), (170, 19543), (191, 19585), (192, 19588), (201, 19618), (211, 19645), (234, 19738), (243, 19762), (270, 19846), (280, 19891), (291, 19927), (340, 20047), (345, 20065), (350, 20080), (355, 20098), (356, 20101), (371, 20179), (390, 20236), (392, 20239), (394, 20242), (418, 20326), (420, 20335), (428, 20362), (456, 20473), (457, 20476), (484, 20644), (503, 20719), (505, 20728), (513, 20755), (525, 20788), (530, 20803), (534, 20818), (536, 20824), (551, 20902), (552, 20905), (584, 21040),

Gene: SoilAssassin_25 Start: 20498, Stop: 22021, Start Num: 169

Candidate Starts for SoilAssassin_25:

(Start: 169 @20498 has 19 MA's), (207, 20570), (212, 20582), (221, 20609), (225, 20633), (266, 20753), (270, 20762), (286, 20828), (337, 20942), (349, 20984), (358, 21014), (364, 21044), (379, 21110), (389, 21134), (401, 21158), (409, 21176), (411, 21188), (414, 21206), (417, 21221), (419, 21227), (436, 21278), (441, 21305), (455, 21356), (481, 21524), (486, 21545), (502, 21623), (513, 21662), (521, 21683), (523, 21686), (526, 21698), (536, 21737), (560, 21884), (572, 21944), (573, 21947),

Gene: Spooky_29 Start: 22210, Stop: 24102, Start Num: 25

Candidate Starts for Spooky_29:

(Start: 25 @22210 has 2 MA's), (65, 22372), (82, 22402), (Start: 128 @22483 has 1 MA's), (129, 22486), (138, 22501), (139, 22504), (173, 22582), (187, 22606), (216, 22696), (222, 22723), (230, 22744), (235, 22762), (238, 22774), (255, 22834), (275, 22888), (321, 23002), (330, 23029), (349, 23089), (350, 23092), (358, 23122), (391, 23239), (400, 23251), (413, 23308), (417, 23326), (449, 23458), (455, 23482), (462, 23515), (483, 23647), (484, 23650), (503, 23731), (511, 23761), (539, 23842), (560, 23953), (571, 24007),

Gene: Sproutie_25 Start: 20505, Stop: 22028, Start Num: 169

Candidate Starts for Sproutie_25:

(Start: 169 @20505 has 19 MA's), (207, 20577), (212, 20589), (221, 20616), (222, 20622), (225, 20640), (266, 20760), (270, 20769), (286, 20835), (337, 20949), (349, 20991), (358, 21021), (364, 21051), (376, 21111), (379, 21117), (389, 21141), (401, 21165), (409, 21183), (411, 21195), (414, 21213), (417, 21228), (419, 21234), (436, 21285), (441, 21312), (455, 21363), (481, 21531), (513, 21669), (521, 21690), (523, 21693), (526, 21705), (536, 21744), (560, 21891), (572, 21951), (573,

21954),

Gene: Squiddly_31 Start: 23622, Stop: 25514, Start Num: 25

Candidate Starts for Squiddly_31:

(Start: 25 @23622 has 2 MA's), (65, 23784), (82, 23814), (Start: 128 @23895 has 1 MA's), (129, 23898), (138, 23913), (139, 23916), (173, 23994), (187, 24018), (216, 24108), (222, 24135), (230, 24156), (235, 24174), (238, 24186), (255, 24246), (275, 24300), (321, 24414), (330, 24441), (349, 24501), (350, 24504), (358, 24534), (391, 24651), (400, 24663), (413, 24720), (417, 24738), (449, 24870), (455, 24894), (462, 24927), (483, 25059), (484, 25062), (503, 25143), (511, 25173), (539, 25254), (560, 25365), (571, 25419),

Gene: Stephig9_28 Start: 21490, Stop: 23211, Start Num: 64

Candidate Starts for Stephig9_28:

(Start: 64 @21490 has 12 MA's), (136, 21634), (187, 21748), (230, 21874), (236, 21895), (256, 21967), (266, 21991), (280, 22045), (327, 22147), (356, 22243), (366, 22297), (375, 22345), (421, 22474), (427, 22492), (457, 22618), (491, 22822), (492, 22831), (515, 22912), (542, 23008), (567, 23107),

Gene: StorminNorm_36 Start: 31838, Stop: 33559, Start Num: 98

Candidate Starts for StorminNorm_36:

(Start: 98 @31838 has 30 MA's), (155, 31961), (160, 31973), (188, 32039), (210, 32108), (218, 32144), (281, 32369), (293, 32408), (316, 32468), (332, 32513), (349, 32573), (383, 32708), (386, 32714), (406, 32756), (410, 32771), (416, 32807), (424, 32828), (447, 32927), (467, 33011), (471, 33044), (476, 33089), (477, 33092), (484, 33128), (491, 33164), (493, 33176), (504, 33212), (515, 33248), (533, 33302),

Gene: Stultus_35 Start: 32209, Stop: 33930, Start Num: 98

Candidate Starts for Stultus_35:

(Start: 98 @32209 has 30 MA's), (160, 32344), (162, 32353), (176, 32386), (188, 32410), (210, 32479), (228, 32554), (281, 32740), (293, 32779), (297, 32788), (302, 32803), (326, 32860), (332, 32884), (351, 32956), (370, 33043), (383, 33079), (386, 33085), (406, 33127), (410, 33142), (412, 33151), (447, 33298), (467, 33382), (471, 33415), (477, 33463), (490, 33529), (491, 33535), (493, 33547), (503, 33577), (504, 33583), (515, 33619), (519, 33628), (533, 33673),

Gene: Suerte_24 Start: 21509, Stop: 23182, Start Num: 87

Candidate Starts for Suerte_24:

(34, 21338), (Start: 36 @21341 has 3 MA's), (Start: 87 @21509 has 4 MA's), (109, 21551), (115, 21566), (126, 21590), (189, 21719), (216, 21806), (221, 21827), (230, 21854), (231, 21863), (238, 21884), (241, 21890), (255, 21944), (349, 22187), (391, 22331), (400, 22343), (402, 22358), (410, 22379), (412, 22388), (413, 22400), (449, 22550), (461, 22604), (484, 22742), (487, 22757), (511, 22853), (566, 23060),

Gene: Suscepit_28 Start: 22923, Stop: 24428, Start Num: 168

Candidate Starts for Suscepit_28:

(Start: 168 @22923 has 29 MA's), (195, 22992), (199, 23004), (235, 23115), (238, 23127), (241, 23133), (268, 23220), (275, 23256), (276, 23262), (279, 23271), (376, 23565), (406, 23619), (407, 23622), (412, 23643), (422, 23688), (447, 23793), (467, 23877), (476, 23958), (477, 23961), (501, 24084), (532, 24180), (543, 24228), (553, 24288), (565, 24321), (568, 24327), (581, 24399),

Gene: Syleon_30 Start: 24097, Stop: 25749, Start Num: 92

Candidate Starts for Syleon_30:

(Start: 92 @24097 has 5 MA's), (181, 24271), (Start: 184 @24277 has 1 MA's), (186, 24280), (191, 24295), (203, 24337), (210, 24349), (220, 24391), (221, 24394), (222, 24400), (226, 24412), (230, 24421), (235, 24439), (238, 24451), (241, 24457), (261, 24523), (268, 24538), (271, 24544), (317,

24679), (329, 24706), (330, 24712), (358, 24805), (400, 24925), (412, 24967), (413, 24979), (449, 25129), (455, 25153), (458, 25171), (471, 25234), (484, 25321), (487, 25336), (503, 25402), (508, 25420), (514, 25441), (529, 25483), (534, 25507), (547, 25555), (562, 25630), (572, 25681), (586, 25744),

Gene: Tangent_38 Start: 33252, Stop: 35174, Start Num: 26

Candidate Starts for Tangent_38:

(Start: 26 @33252 has 23 MA's), (60, 33387), (65, 33396), (82, 33429), (90, 33453), (124, 33522), (138, 33552), (156, 33597), (221, 33789), (222, 33795), (230, 33816), (235, 33834), (238, 33846), (255, 33906), (275, 33960), (321, 34074), (349, 34161), (362, 34215), (376, 34281), (391, 34311), (400, 34323), (412, 34368), (413, 34380), (417, 34398), (425, 34425), (442, 34503), (449, 34530), (455, 34554), (476, 34677), (483, 34719), (503, 34803), (511, 34833), (523, 34860), (539, 34914), (545, 34944), (557, 35016), (560, 35025),

Gene: Tangerine_36 Start: 31841, Stop: 33562, Start Num: 98

Candidate Starts for Tangerine_36:

(Start: 98 @31841 has 30 MA's), (155, 31964), (160, 31976), (188, 32042), (210, 32111), (218, 32147), (228, 32186), (281, 32372), (293, 32411), (316, 32471), (332, 32516), (349, 32576), (383, 32711), (386, 32717), (406, 32759), (410, 32774), (416, 32810), (424, 32831), (447, 32930), (467, 33014), (471, 33047), (476, 33092), (477, 33095), (484, 33131), (491, 33167), (493, 33179), (504, 33215), (515, 33251), (533, 33305),

Gene: Tarzan_25 Start: 19667, Stop: 21313, Start Num: 81

Candidate Starts for Tarzan_25:

(Start: 81 @19667 has 1 MA's), (129, 19766), (173, 19862), (182, 19877), (222, 20003), (230, 20024), (238, 20054), (293, 20180), (349, 20300), (350, 20303), (351, 20312), (362, 20354), (364, 20363), (376, 20420), (382, 20432), (391, 20450), (400, 20462), (413, 20519), (424, 20561), (428, 20576), (449, 20669), (455, 20693), (458, 20711), (476, 20819), (484, 20864), (511, 20975), (513, 20981), (523, 21002), (534, 21044), (543, 21080), (551, 21125), (573, 21230),

Gene: Tayonia_28 Start: 22923, Stop: 24428, Start Num: 168

Candidate Starts for Tayonia_28:

(Start: 168 @22923 has 29 MA's), (195, 22992), (199, 23004), (235, 23115), (238, 23127), (241, 23133), (268, 23220), (275, 23256), (276, 23262), (279, 23271), (376, 23565), (406, 23619), (407, 23622), (412, 23643), (422, 23688), (447, 23793), (467, 23877), (476, 23958), (477, 23961), (501, 24084), (532, 24180), (543, 24228), (553, 24288), (565, 24321), (568, 24327), (581, 24399),

Gene: ThankyouJordi_25 Start: 22901, Stop: 24409, Start Num: 168

Candidate Starts for ThankyouJordi_25:

(43, 22586), (Start: 81 @22694 has 1 MA's), (111, 22763), (113, 22766), (124, 22790), (125, 22796), (Start: 168 @22901 has 29 MA's), (198, 22979), (199, 22982), (229, 23072), (240, 23108), (241, 23111), (275, 23234), (276, 23240), (279, 23249), (363, 23480), (374, 23543), (376, 23546), (396, 23573), (406, 23600), (407, 23603), (427, 23684), (447, 23774), (477, 23942), (491, 24017), (494, 24032), (532, 24161), (549, 24245), (568, 24308), (581, 24380),

Gene: Thimann_26 Start: 21977, Stop: 23650, Start Num: 87

Candidate Starts for Thimann_26:

(34, 21806), (Start: 36 @21809 has 3 MA's), (Start: 87 @21977 has 4 MA's), (109, 22019), (115, 22034), (126, 22058), (189, 22187), (216, 22274), (221, 22295), (230, 22322), (231, 22331), (238, 22352), (241, 22358), (255, 22412), (349, 22655), (391, 22799), (400, 22811), (402, 22826), (410, 22847), (412, 22856), (413, 22868), (449, 23018), (461, 23072), (484, 23210), (487, 23225), (511, 23321), (566, 23528),

Gene: Thing3_36 Start: 33130, Stop: 35052, Start Num: 26

Candidate Starts for Thing3_36:

(Start: 26 @33130 has 23 MA's), (60, 33265), (65, 33274), (82, 33307), (90, 33331), (124, 33400), (156, 33475), (221, 33667), (222, 33673), (230, 33694), (235, 33712), (238, 33724), (255, 33784), (275, 33838), (321, 33952), (349, 34039), (362, 34093), (373, 34147), (376, 34159), (391, 34189), (400, 34201), (412, 34246), (413, 34258), (417, 34276), (425, 34303), (442, 34381), (449, 34408), (455, 34432), (476, 34555), (483, 34597), (503, 34681), (511, 34711), (523, 34738), (539, 34792), (545, 34822), (557, 34894), (560, 34903),

Gene: TillyBobJoe_33 Start: 28008, Stop: 29942, Start Num: 28

Candidate Starts for TillyBobJoe_33:

(Start: 28 @28008 has 17 MA's), (57, 28131), (65, 28152), (86, 28200), (138, 28308), (149, 28329), (182, 28410), (195, 28446), (197, 28449), (220, 28527), (221, 28530), (222, 28536), (230, 28557), (238, 28587), (241, 28593), (283, 28728), (315, 28815), (320, 28824), (323, 28830), (326, 28836), (349, 28911), (358, 28944), (362, 28965), (379, 29037), (391, 29061), (400, 29073), (413, 29130), (449, 29280), (455, 29304), (484, 29472), (487, 29487), (511, 29583), (543, 29694), (549, 29730),

Gene: TimTam_26 Start: 22926, Stop: 24431, Start Num: 168

Candidate Starts for TimTam_26:

(43, 22611), (Start: 81 @22719 has 1 MA's), (111, 22788), (113, 22791), (124, 22815), (125, 22821), (Start: 168 @22926 has 29 MA's), (195, 22995), (199, 23007), (235, 23118), (237, 23124), (238, 23130), (241, 23136), (268, 23223), (275, 23259), (276, 23265), (279, 23274), (376, 23568), (406, 23622), (407, 23625), (412, 23646), (422, 23691), (447, 23796), (467, 23880), (476, 23961), (477, 23964), (532, 24183), (543, 24231), (553, 24291), (565, 24324), (568, 24330), (581, 24402),

Gene: TinyDot_26 Start: 19859, Stop: 21466, Start Num: 134

Candidate Starts for TinyDot_26:

(Start: 134 @19859 has 5 MA's), (166, 19928), (174, 19943), (178, 19949), (195, 19991), (221, 20075), (222, 20081), (230, 20102), (235, 20120), (250, 20171), (255, 20192), (261, 20204), (329, 20390), (349, 20456), (350, 20459), (358, 20489), (373, 20567), (385, 20588), (391, 20600), (400, 20612), (413, 20669), (423, 20708), (449, 20819), (462, 20876), (470, 20915), (484, 21011), (491, 21047), (503, 21092), (513, 21128), (539, 21203), (543, 21227), (551, 21272), (557, 21305), (560, 21314), (573, 21377),

Gene: Togo_33 Start: 28209, Stop: 30131, Start Num: 28

Candidate Starts for Togo_33:

(Start: 28 @28209 has 17 MA's), (57, 28332), (65, 28353), (86, 28401), (138, 28509), (149, 28530), (182, 28611), (195, 28647), (197, 28650), (220, 28728), (221, 28731), (222, 28737), (230, 28758), (238, 28788), (241, 28794), (283, 28929), (315, 29016), (320, 29025), (323, 29031), (326, 29037), (349, 29112), (358, 29145), (362, 29166), (379, 29238), (391, 29262), (400, 29274), (413, 29331), (449, 29481), (455, 29505), (484, 29673), (487, 29688), (511, 29784), (543, 29895), (549, 29931),

Gene: Tourach_20 Start: 19226, Stop: 21022, Start Num: 51

Candidate Starts for Tourach_20:

(Start: 51 @19226 has 26 MA's), (117, 19379), (127, 19403), (172, 19511), (192, 19553), (201, 19583), (211, 19610), (232, 19700), (234, 19703), (243, 19727), (270, 19811), (280, 19856), (299, 19907), (340, 20012), (350, 20045), (356, 20066), (371, 20144), (394, 20207), (418, 20291), (420, 20300), (456, 20438), (471, 20516), (484, 20609), (487, 20624), (503, 20684), (505, 20693), (513, 20720), (517, 20729), (525, 20753), (530, 20768), (534, 20783), (536, 20789), (540, 20801), (566, 20918), (582, 20993), (584, 21005),

Gene: Trax_30 Start: 25810, Stop: 27396, Start Num: 92

Candidate Starts for Trax_30:

(Start: 92 @25810 has 5 MA's), (111, 25846), (179, 25990), (189, 26011), (190, 26014), (191, 26017), (196, 26041), (208, 26071), (210, 26074), (220, 26116), (221, 26119), (230, 26146), (231, 26155), (238, 26176), (241, 26182), (253, 26233), (255, 26236), (278, 26257), (302, 26299), (314, 26320), (317, 26323), (329, 26335), (349, 26401), (362, 26455), (369, 26491), (400, 26554), (408, 26578), (412, 26596), (413, 26608), (417, 26626), (421, 26641), (449, 26758), (450, 26764), (455, 26782), (457, 26788), (458, 26800), (465, 26827), (478, 26926), (484, 26950), (487, 26965), (496, 27004), (503, 27031), (504, 27037), (508, 27049), (511, 27061), (513, 27067), (526, 27103), (541, 27157), (567, 27286), (571, 27313), (580, 27346),

Gene: Trine_24 Start: 19054, Stop: 20592, Start Num: 159

Candidate Starts for Trine_24:

(Start: 159 @19054 has 2 MA's), (202, 19165), (204, 19174), (225, 19240), (231, 19261), (236, 19273), (251, 19327), (279, 19426), (289, 19453), (360, 19648), (396, 19750), (406, 19777), (447, 19951), (463, 20017), (467, 20035), (471, 20068), (491, 20191), (493, 20203), (501, 20239), (516, 20287), (522, 20302), (558, 20455), (560, 20461), (563, 20473), (564, 20482),

Gene: Trumpet_28 Start: 22923, Stop: 24428, Start Num: 168

Candidate Starts for Trumpet_28:

(Start: 168 @22923 has 29 MA's), (195, 22992), (199, 23004), (235, 23115), (238, 23127), (241, 23133), (268, 23220), (275, 23256), (276, 23262), (279, 23271), (376, 23565), (406, 23619), (407, 23622), (412, 23643), (422, 23688), (447, 23793), (467, 23877), (476, 23958), (477, 23961), (501, 24084), (532, 24180), (543, 24228), (553, 24288), (565, 24321), (568, 24327), (581, 24399),

Gene: TuertoX_25 Start: 20505, Stop: 22028, Start Num: 169

Candidate Starts for TuertoX_25:

(Start: 169 @20505 has 19 MA's), (207, 20577), (212, 20589), (221, 20616), (222, 20622), (225, 20640), (266, 20760), (270, 20769), (286, 20835), (337, 20949), (349, 20991), (358, 21021), (364, 21051), (376, 21111), (379, 21117), (389, 21141), (401, 21165), (409, 21183), (411, 21195), (414, 21213), (417, 21228), (419, 21234), (436, 21285), (441, 21312), (455, 21363), (481, 21531), (513, 21669), (521, 21690), (523, 21693), (526, 21705), (536, 21744), (560, 21891), (572, 21951), (573, 21954),

Gene: Tycho_36 Start: 31930, Stop: 33651, Start Num: 98

Candidate Starts for Tycho_36:

(Start: 98 @31930 has 30 MA's), (155, 32053), (160, 32065), (188, 32131), (210, 32200), (218, 32236), (281, 32461), (293, 32500), (316, 32560), (332, 32605), (349, 32665), (383, 32800), (386, 32806), (406, 32848), (410, 32863), (416, 32899), (424, 32920), (447, 33019), (467, 33103), (471, 33136), (476, 33181), (477, 33184), (484, 33220), (491, 33256), (493, 33268), (504, 33304), (515, 33340), (533, 33394),

Gene: Underpass_20 Start: 19233, Stop: 21029, Start Num: 51

Candidate Starts for Underpass_20:

(Start: 48 @19230 has 5 MA's), (Start: 51 @19233 has 26 MA's), (117, 19386), (127, 19410), (166, 19506), (170, 19515), (191, 19557), (192, 19560), (201, 19590), (211, 19617), (234, 19710), (243, 19734), (270, 19818), (280, 19863), (291, 19899), (340, 20019), (345, 20037), (350, 20052), (355, 20070), (356, 20073), (371, 20151), (390, 20208), (392, 20211), (394, 20214), (418, 20298), (420, 20307), (428, 20334), (456, 20445), (457, 20448), (484, 20616), (503, 20691), (505, 20700), (513, 20727), (525, 20760), (530, 20775), (534, 20790), (536, 20796), (551, 20874), (552, 20877), (566, 20925), (584, 21012),

Gene: Upyo_24 Start: 19301, Stop: 20836, Start Num: 159

Candidate Starts for Upyo_24:

(153, 19277), (Start: 159 @19301 has 2 MA's), (202, 19412), (220, 19475), (251, 19574), (289, 19700), (290, 19706), (292, 19712), (301, 19730), (306, 19745), (309, 19751), (310, 19757), (341, 19826), (347, 19844), (361, 19898), (378, 19976), (399, 20003), (413, 20063), (417, 20081), (447, 20201), (455, 20234), (460, 20261), (477, 20369), (487, 20426), (490, 20441), (495, 20465), (554, 20699), (576, 20786),

Gene: Valary_36 Start: 29154, Stop: 31076, Start Num: 28

Candidate Starts for Valary_36:

(Start: 28 @29154 has 17 MA's), (57, 29277), (65, 29298), (86, 29346), (138, 29454), (149, 29475), (182, 29556), (195, 29592), (197, 29595), (220, 29673), (221, 29676), (222, 29682), (230, 29703), (238, 29733), (241, 29739), (283, 29874), (315, 29961), (320, 29970), (323, 29976), (326, 29982), (349, 30057), (358, 30090), (362, 30111), (379, 30183), (391, 30207), (400, 30219), (413, 30276), (449, 30426), (455, 30450), (484, 30618), (487, 30633), (511, 30729), (543, 30840), (549, 30876),

Gene: Vasanti_24 Start: 20059, Stop: 21591, Start Num: 169

Candidate Starts for Vasanti_24:

(Start: 169 @20059 has 19 MA's), (177, 20065), (207, 20131), (222, 20176), (233, 20215), (260, 20296), (266, 20311), (270, 20320), (286, 20386), (337, 20512), (358, 20584), (364, 20614), (379, 20680), (389, 20704), (401, 20728), (409, 20746), (411, 20758), (419, 20797), (436, 20848), (441, 20875), (481, 21094), (489, 21133), (490, 21136), (501, 21190), (503, 21196), (513, 21232), (521, 21253), (523, 21256), (526, 21268), (536, 21307), (545, 21346), (560, 21454), (573, 21517),

Gene: Vetric_20 Start: 19234, Stop: 21030, Start Num: 51

Candidate Starts for Vetric_20:

(Start: 48 @19231 has 5 MA's), (Start: 51 @19234 has 26 MA's), (117, 19387), (127, 19411), (166, 19507), (170, 19516), (192, 19561), (194, 19570), (201, 19591), (211, 19618), (234, 19711), (243, 19735), (270, 19819), (280, 19864), (340, 20020), (345, 20038), (350, 20053), (355, 20071), (356, 20074), (371, 20152), (390, 20209), (392, 20212), (394, 20215), (418, 20299), (420, 20308), (428, 20335), (456, 20446), (457, 20449), (484, 20617), (487, 20632), (503, 20692), (505, 20701), (513, 20728), (525, 20761), (530, 20776), (534, 20791), (536, 20797), (551, 20875), (552, 20878), (566, 20926), (584, 21013),

Gene: Vivi2_40 Start: 34410, Stop: 36332, Start Num: 26

Candidate Starts for Vivi2_40:

(Start: 26 @34410 has 23 MA's), (60, 34545), (65, 34554), (82, 34587), (90, 34611), (124, 34680), (138, 34710), (156, 34755), (221, 34947), (222, 34953), (230, 34974), (235, 34992), (238, 35004), (255, 35064), (275, 35118), (321, 35232), (349, 35319), (362, 35373), (376, 35439), (391, 35469), (400, 35481), (412, 35526), (413, 35538), (417, 35556), (425, 35583), (442, 35661), (449, 35688), (455, 35712), (476, 35835), (483, 35877), (503, 35961), (511, 35991), (523, 36018), (539, 36072), (545, 36102), (557, 36174), (560, 36183),

Gene: WelcomeAyanna_25 Start: 22901, Stop: 24409, Start Num: 168

Candidate Starts for WelcomeAyanna_25:

(43, 22586), (Start: 81 @22694 has 1 MA's), (111, 22763), (113, 22766), (124, 22790), (125, 22796), (Start: 168 @22901 has 29 MA's), (198, 22979), (199, 22982), (229, 23072), (240, 23108), (241, 23111), (275, 23234), (276, 23240), (279, 23249), (363, 23480), (374, 23543), (376, 23546), (396, 23573), (406, 23600), (407, 23603), (427, 23684), (447, 23774), (477, 23942), (491, 24017), (494, 24032), (532, 24161), (549, 24245), (568, 24308), (581, 24380),

Gene: Whiteclaw_25 Start: 20505, Stop: 22028, Start Num: 169

Candidate Starts for Whiteclaw_25:

(Start: 169 @20505 has 19 MA's), (207, 20577), (212, 20589), (221, 20616), (222, 20622), (225, 20640), (266, 20760), (270, 20769), (286, 20835), (337, 20949), (349, 20991), (358, 21021), (364,

21051), (376, 21111), (379, 21117), (389, 21141), (401, 21165), (409, 21183), (411, 21195), (414, 21213), (417, 21228), (419, 21234), (436, 21285), (441, 21312), (455, 21363), (481, 21531), (513, 21669), (521, 21690), (523, 21693), (526, 21705), (536, 21744), (560, 21891), (572, 21951), (573, 21954),

Gene: Whitney_30 Start: 23030, Stop: 24865, Start Num: 31

Candidate Starts for Whitney_30:

(Start: 31 @23030 has 22 MA's), (Start: 79 @23192 has 1 MA's), (91, 23222), (116, 23276), (124, 23291), (Start: 128 @23303 has 1 MA's), (129, 23306), (140, 23321), (142, 23324), (144, 23327), (182, 23417), (187, 23426), (189, 23429), (216, 23516), (221, 23537), (222, 23543), (230, 23564), (231, 23573), (238, 23594), (241, 23600), (285, 23702), (286, 23705), (302, 23735), (306, 23747), (321, 23771), (349, 23846), (351, 23858), (362, 23900), (368, 23933), (376, 23966), (379, 23972), (391, 23996), (400, 24008), (413, 24065), (417, 24083), (449, 24215), (455, 24239), (458, 24257), (484, 24410), (487, 24425), (489, 24437), (490, 24440), (491, 24446), (503, 24491), (508, 24509), (511, 24521), (513, 24527), (519, 24539), (523, 24548), (539, 24602), (551, 24671), (557, 24704), (559, 24710), (572, 24773), (573, 24776), (577, 24794), (582, 24815), (583, 24824),

Gene: Wigglewigggle_20 Start: 19260, Stop: 21056, Start Num: 51

Candidate Starts for Wigglewigggle_20:

(Start: 48 @19257 has 5 MA's), (Start: 51 @19260 has 26 MA's), (117, 19413), (127, 19437), (166, 19533), (170, 19542), (191, 19584), (192, 19587), (201, 19617), (211, 19644), (234, 19737), (243, 19761), (270, 19845), (280, 19890), (291, 19926), (340, 20046), (345, 20064), (350, 20079), (355, 20097), (356, 20100), (371, 20178), (390, 20235), (392, 20238), (394, 20241), (418, 20325), (420, 20334), (428, 20361), (456, 20472), (457, 20475), (484, 20643), (503, 20718), (505, 20727), (513, 20754), (525, 20787), (530, 20802), (534, 20817), (536, 20823), (551, 20901), (552, 20904), (584, 21039),

Gene: Wilder_20 Start: 19233, Stop: 21029, Start Num: 51

Candidate Starts for Wilder_20:

(Start: 48 @19230 has 5 MA's), (Start: 51 @19233 has 26 MA's), (117, 19386), (127, 19410), (166, 19506), (170, 19515), (191, 19557), (192, 19560), (201, 19590), (211, 19617), (234, 19710), (243, 19734), (270, 19818), (280, 19863), (291, 19899), (340, 20019), (345, 20037), (350, 20052), (355, 20070), (356, 20073), (371, 20151), (390, 20208), (392, 20211), (394, 20214), (418, 20298), (420, 20307), (428, 20334), (456, 20445), (457, 20448), (484, 20616), (503, 20691), (505, 20700), (513, 20727), (525, 20760), (530, 20775), (534, 20790), (536, 20796), (551, 20874), (552, 20877), (566, 20925), (584, 21012),

Gene: Winky_20 Start: 19225, Stop: 21024, Start Num: 48

Candidate Starts for Winky_20:

(Start: 48 @19225 has 5 MA's), (Start: 51 @19228 has 26 MA's), (117, 19381), (127, 19405), (166, 19501), (170, 19510), (192, 19555), (201, 19585), (211, 19612), (234, 19705), (243, 19729), (270, 19813), (280, 19858), (340, 20014), (345, 20032), (350, 20047), (355, 20065), (356, 20068), (371, 20146), (390, 20203), (394, 20209), (418, 20293), (420, 20302), (456, 20440), (457, 20443), (484, 20611), (503, 20686), (505, 20695), (513, 20722), (520, 20740), (525, 20755), (530, 20770), (534, 20785), (536, 20791), (551, 20869), (552, 20872), (566, 20920), (584, 21007),

Gene: Wizard_33 Start: 28352, Stop: 30274, Start Num: 28

Candidate Starts for Wizard_33:

(Start: 28 @28352 has 17 MA's), (57, 28475), (65, 28496), (86, 28544), (138, 28652), (149, 28673), (182, 28754), (195, 28790), (197, 28793), (220, 28871), (221, 28874), (222, 28880), (230, 28901), (238, 28931), (241, 28937), (283, 29072), (315, 29159), (320, 29168), (323, 29174), (326, 29180), (349, 29255), (358, 29288), (362, 29309), (379, 29381), (391, 29405), (400, 29417), (413, 29474), (449, 29624), (455, 29648), (484, 29816), (487, 29831), (511, 29927), (543, 30038), (549, 30074),

Gene: Yeet412_25 Start: 20498, Stop: 22021, Start Num: 169

Candidate Starts for Yeet412_25:

(Start: 169 @20498 has 19 MA's), (207, 20570), (212, 20582), (221, 20609), (225, 20633), (266, 20753), (270, 20762), (286, 20828), (337, 20942), (349, 20984), (358, 21014), (364, 21044), (379, 21110), (389, 21134), (401, 21158), (409, 21176), (411, 21188), (414, 21206), (417, 21221), (419, 21227), (436, 21278), (441, 21305), (455, 21356), (481, 21524), (486, 21545), (502, 21623), (513, 21662), (521, 21683), (523, 21686), (526, 21698), (536, 21737), (560, 21884), (572, 21944), (573, 21947),

Gene: Yeezy_28 Start: 22145, Stop: 23650, Start Num: 168

Candidate Starts for Yeezy_28:

(Start: 81 @21938 has 1 MA's), (111, 22007), (113, 22010), (124, 22034), (125, 22040), (Start: 168 @22145 has 29 MA's), (195, 22214), (199, 22226), (235, 22337), (238, 22349), (241, 22355), (268, 22442), (275, 22478), (276, 22484), (279, 22493), (376, 22787), (406, 22841), (407, 22844), (412, 22865), (422, 22910), (447, 23015), (467, 23099), (476, 23180), (477, 23183), (501, 23306), (532, 23402), (543, 23450), (548, 23465), (553, 23510), (565, 23543), (568, 23549), (581, 23621),

Gene: YorkOnyx_37 Start: 32189, Stop: 33910, Start Num: 98

Candidate Starts for YorkOnyx_37:

(Start: 98 @32189 has 30 MA's), (155, 32312), (160, 32324), (188, 32390), (210, 32459), (218, 32495), (228, 32534), (281, 32720), (293, 32759), (316, 32819), (332, 32864), (349, 32924), (383, 33059), (386, 33065), (406, 33107), (410, 33122), (416, 33158), (424, 33179), (447, 33278), (467, 33362), (471, 33395), (476, 33440), (477, 33443), (491, 33515), (493, 33527), (504, 33563), (515, 33599), (533, 33653),

Gene: Yvonnetastic_53 Start: 36927, Stop: 38693, Start Num: 53

Candidate Starts for Yvonnetastic_53:

(Start: 53 @36927 has 2 MA's), (58, 36948), (99, 37044), (191, 37242), (194, 37260), (197, 37269), (208, 37302), (230, 37386), (259, 37485), (317, 37632), (329, 37653), (349, 37719), (354, 37737), (364, 37782), (413, 37926), (423, 37965), (449, 38076), (474, 38202), (490, 38298), (498, 38340), (501, 38346), (513, 38388), (514, 38391),

Gene: Zakai_20 Start: 19222, Stop: 21018, Start Num: 51

Candidate Starts for Zakai_20:

(Start: 48 @19219 has 5 MA's), (Start: 51 @19222 has 26 MA's), (117, 19375), (127, 19399), (166, 19495), (170, 19504), (192, 19549), (201, 19579), (211, 19606), (234, 19699), (243, 19723), (270, 19807), (280, 19852), (340, 20008), (345, 20026), (350, 20041), (355, 20059), (356, 20062), (371, 20140), (390, 20197), (392, 20200), (394, 20203), (418, 20287), (420, 20296), (428, 20323), (456, 20434), (457, 20437), (484, 20605), (503, 20680), (505, 20689), (513, 20716), (525, 20749), (530, 20764), (534, 20779), (536, 20785), (551, 20863), (552, 20866), (566, 20914), (584, 21001),

Gene: Zameen_28 Start: 22923, Stop: 24428, Start Num: 168

Candidate Starts for Zameen_28:

(Start: 168 @22923 has 29 MA's), (195, 22992), (199, 23004), (235, 23115), (238, 23127), (241, 23133), (268, 23220), (275, 23256), (276, 23262), (279, 23271), (376, 23565), (406, 23619), (407, 23622), (412, 23643), (422, 23688), (447, 23793), (467, 23877), (476, 23958), (477, 23961), (501, 24084), (532, 24180), (543, 24228), (553, 24288), (565, 24321), (568, 24327), (581, 24399),

Gene: ZhongYanYuan_19 Start: 19053, Stop: 20849, Start Num: 51

Candidate Starts for ZhongYanYuan_19:

(Start: 51 @19053 has 26 MA's), (100, 19173), (111, 19194), (117, 19206), (127, 19230), (141, 19257), (166, 19326), (170, 19335), (187, 19368), (192, 19380), (201, 19410), (211, 19437), (243, 19554),

(254, 19602), (270, 19638), (280, 19683), (299, 19734), (340, 19839), (345, 19857), (355, 19890), (356, 19893), (363, 19932), (371, 19971), (392, 20031), (394, 20034), (418, 20118), (456, 20265), (471, 20343), (484, 20436), (487, 20451), (503, 20511), (505, 20520), (513, 20547), (530, 20595), (534, 20610), (551, 20694), (552, 20697), (566, 20745), (570, 20760), (584, 20832),

Gene: Zirinka_26 Start: 22938, Stop: 24443, Start Num: 168

Candidate Starts for Zirinka_26:

(43, 22623), (Start: 81 @22731 has 1 MA's), (111, 22800), (113, 22803), (124, 22827), (125, 22833), (Start: 168 @22938 has 29 MA's), (195, 23007), (199, 23019), (235, 23130), (237, 23136), (238, 23142), (241, 23148), (243, 23154), (268, 23235), (275, 23271), (276, 23277), (279, 23286), (376, 23580), (406, 23634), (407, 23637), (412, 23658), (422, 23703), (447, 23808), (467, 23892), (476, 23973), (477, 23976), (532, 24195), (543, 24243), (553, 24303), (565, 24336), (568, 24342), (581, 24414),