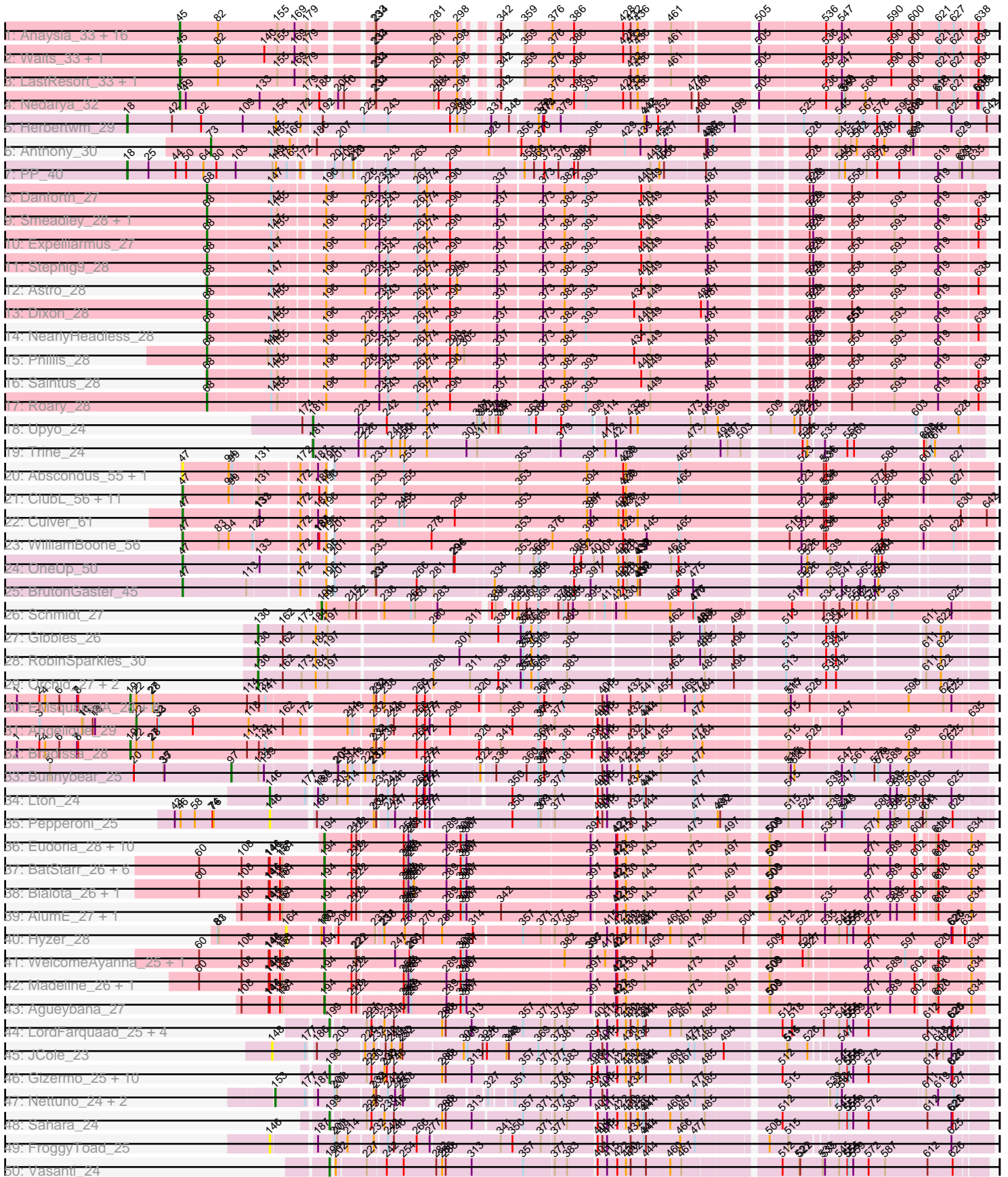
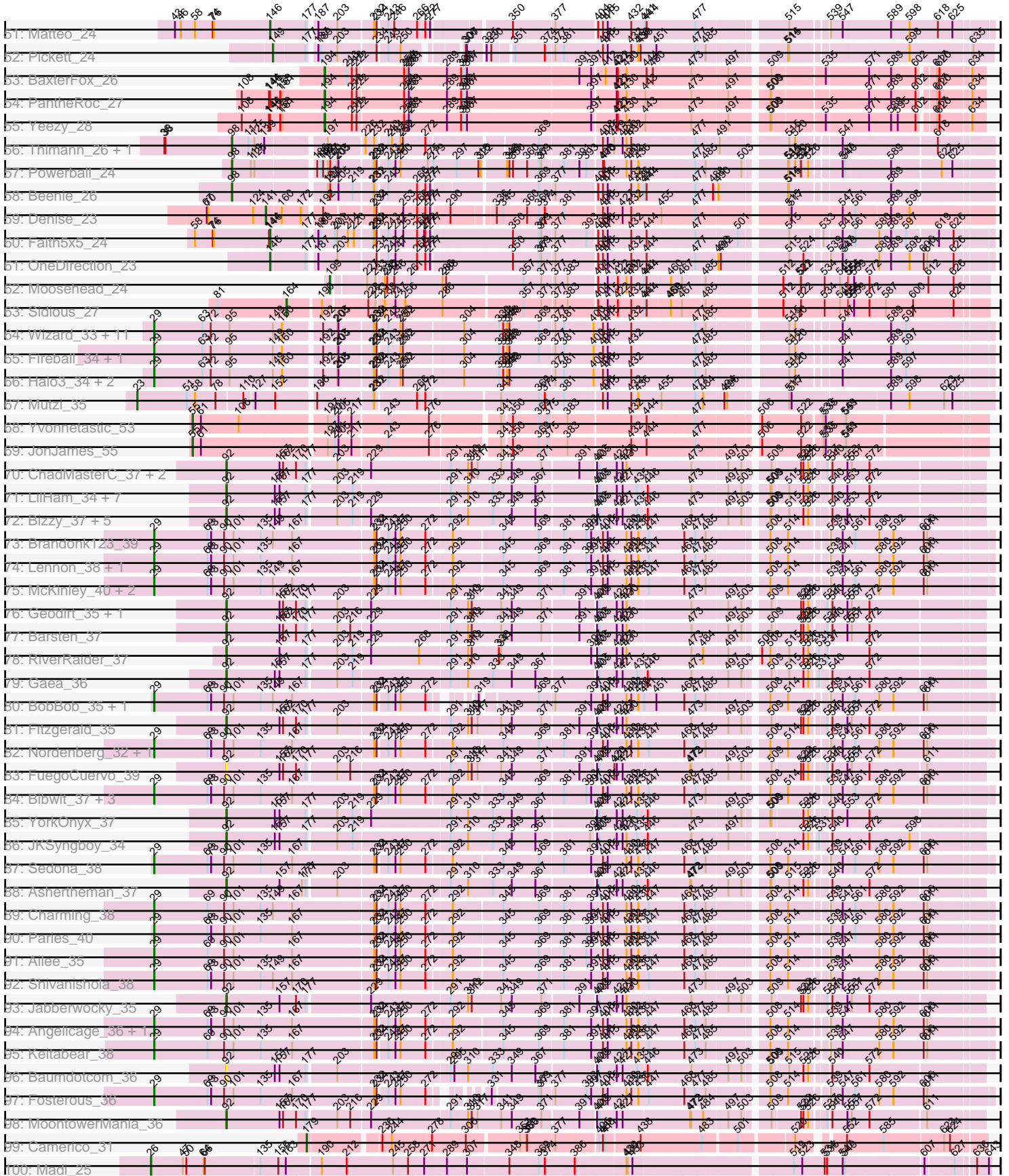


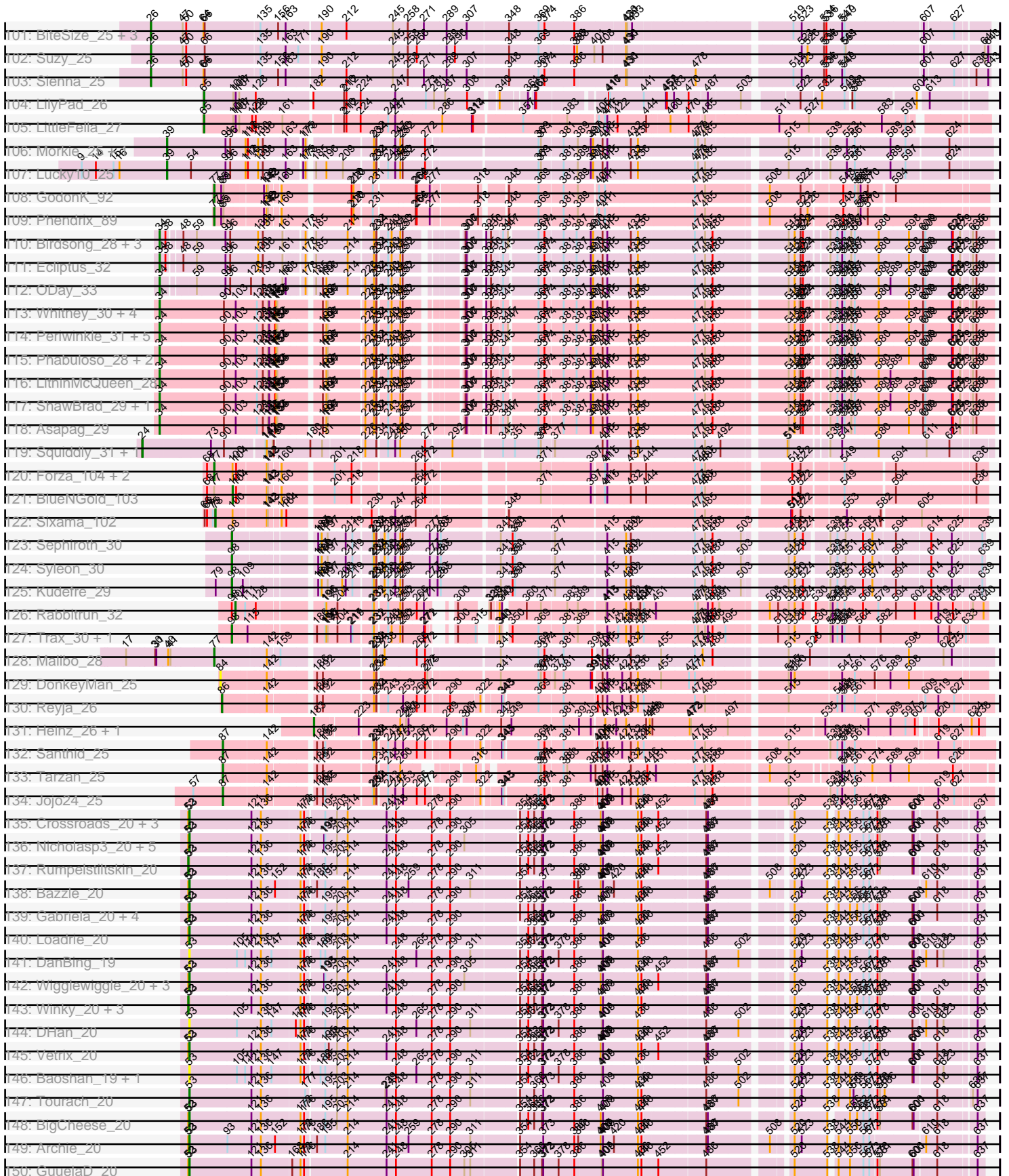
Pham 202613



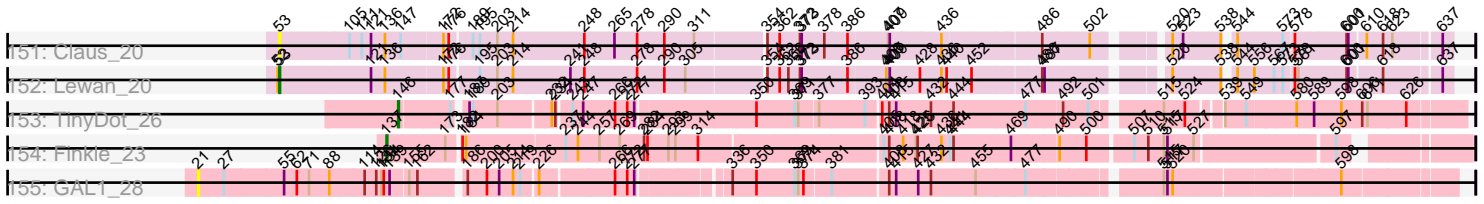
Pham 202613



Pham 202613



Pham 202613



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 202613 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202613 has 312 members, 37 are drafts.

Phages represented in each track:

- Track 1 : Anaysia_33, Soups_33, MinecraftSteve_34, Boohoo_33, Remus_33, Warrior24_34, KatherineG_33, Rosalind_33, Nebulosus_33, Battleship_34, JSwag_33, Strosahl_33, Oofda_34, Looper_34, DekHockey33_33, Switzerland_33, ShayRa_34
- Track 2 : Waits_33, Epsocamisio_33
- Track 3 : LastResort_33, ReMo_33
- Track 4 : Nedarya_32
- Track 5 : Herbertwm_29
- Track 6 : Anthony_30
- Track 7 : PP_40
- Track 8 : Danforth_27
- Track 9 : Smeadley_28, Groundhog_27
- Track 10 : Expelliarmus_27
- Track 11 : Stephig9_28
- Track 12 : Astro_28
- Track 13 : Dixon_28
- Track 14 : NearlyHeadless_28
- Track 15 : Phillis_28
- Track 16 : Saintus_28
- Track 17 : Roary_28
- Track 18 : Upyo_24
- Track 19 : Trine_24
- Track 20 : Abscondus_55, Dusty_54
- Track 21 : ClubL_56, Engineer_58, Lozinak_57, Geeche_55, Bachita_58, Miskis_58, Norvs_57, PhinkBoden_56, Cucurbita_58, Smoothie_58, Toniann_56, Aphelion_56
- Track 22 : Culver_61
- Track 23 : WilliamBoone_56
- Track 24 : OneUp_50
- Track 25 : BrutonGaster_45
- Track 26 : Schmidt_27
- Track 27 : Gibbles_26
- Track 28 : RobinSparkles_30
- Track 29 : Orchid_27, Kampe_27, PatrickStar_27
- Track 30 : EMSquaredA_28, Pollux_28, BritBrat_28, Marteena_28, Floral_28, EnalisNailo_28, Lilas_28
- Track 31 : Angelique_29
- Track 32 : Bradissa_28

- Track 33 : Bunnybear_25
- Track 34 : Lton_24
- Track 35 : Pepperoni_25
- Track 36 : Eudoria_28, Suscepit_28, Antonio_28, Zameen_28, Neobush_28, Polly_25, Maridalia_27, Trumpet_28, Tayonia_28, Manasvini_28, Kita_28
- Track 37 : BatStarr_26, Nymphadora_26, Herod_26, TimTam_26, Bosnia_26, Hugley_26, Eviarto_26
- Track 38 : Bialota_26, Zirinka_26
- Track 39 : AlumE_27, BoyNamedSue_27
- Track 40 : Hyzer_28
- Track 41 : WelcomeAyanna_25, ThankyouJordi_25
- Track 42 : Madeline_26, Ohgeesy_26
- Track 43 : Agueybana_27
- Track 44 : LordFarquaad_25, Attis_25, Yeet412_25, Bjanes7_25, SoilAssassin_25
- Track 45 : JCole_23
- Track 46 : Gizermo_25, Haley23_25, GemG_25, Savage_25, Clap_25, Cynthia_25, Ebert_25, Sproutie_25, Mocha12_25, Whiteclaw_25, TuertoX_25
- Track 47 : Nettuno_24, Lamberg_24, EdnaMode_24
- Track 48 : Sahara_24
- Track 49 : FroggyToad_25
- Track 50 : Vasanti_24
- Track 51 : Matteo_24
- Track 52 : Pickett_24
- Track 53 : BaxterFox_26
- Track 54 : PantheRoc_27
- Track 55 : Yeezy_28
- Track 56 : Thimann_26, Suerte_24
- Track 57 : Powerball_24
- Track 58 : Beenie_26
- Track 59 : Denise_23
- Track 60 : Faith5x5_24
- Track 61 : OneDirection_23
- Track 62 : Moosehead_24
- Track 63 : Sidious_27
- Track 64 : Wizard_33, SmokingBunny_33, Gezellig_34, PullumCavea_33, Jambalaya_33, CherryCola_37, KimmyK_35, Phlop_33, Valary_36, Nubi_33, Togo_33, Savbucketdawg_33
- Track 65 : Fireball_34, TillyBobJoe_33
- Track 66 : Halo3_34, Evamon_33, Salvador_33
- Track 67 : Mutzi_35
- Track 68 : Yvonnetastic_53
- Track 69 : JonJames_55
- Track 70 : ChadMasterC_37, Kewpiedoll_36, Stultus_35
- Track 71 : LilHam_34, Ribeye_37, Baddon_36, Derg_34, Kwobi_37, StorminNorm_36, Tycho_36, SchottB_35
- Track 72 : Bizzy_37, Saronaya_36, Flatwoods_37, Tangerine_36, Kroos_37, Gustavo_36
- Track 73 : Brandonk123_39
- Track 74 : Lennon_38, Sitar_38
- Track 75 : McKinley_40, Vivi2_40, Tangent_38
- Track 76 : Geodirt_35, Sanjuju_35
- Track 77 : Barsten_37
- Track 78 : RiverRaider_37

- Track 79 : Gaea_36
- Track 80 : BobBob_35, Rofo_38
- Track 81 : Fitzgerald_35
- Track 82 : Nordenberg_32, Love_41
- Track 83 : FuegoCuervo_39
- Track 84 : Bibwit_37, Galadriel_38, Kamashten_36, Thing3_36
- Track 85 : YorkOnyx_37
- Track 86 : JKSyngboy_34
- Track 87 : Sedona_38
- Track 88 : Ashertheman_37
- Track 89 : Charming_38
- Track 90 : Paries_40
- Track 91 : Ailee_35
- Track 92 : Shivanishola_38
- Track 93 : Jabberwocky_35
- Track 94 : Angelicage_36, Affeca_36
- Track 95 : Keitabear_38
- Track 96 : Baumdotcom_36
- Track 97 : Fosterous_36
- Track 98 : MoontowerMania_36
- Track 99 : Camerico_31
- Track 100 : Madi_25
- Track 101 : BiteSize_25, Terapin_25, Djokovic_25, Beyoncage_25
- Track 102 : Suzy_25
- Track 103 : Sienna_25
- Track 104 : LilyPad_26
- Track 105 : LittleFella_27
- Track 106 : Morkie_25, PhorbesPhlower_25
- Track 107 : Lucky10_25
- Track 108 : GodonK_92
- Track 109 : Phendrix_89
- Track 110 : Birdsong_28, Kuwabara_28, BearBQ_28, MortyNRick_28
- Track 111 : Ecliptus_32
- Track 112 : ODay_33
- Track 113 : Whitney_30, Kamaru_29, Getalong_30, Budski_29, Holliday_29
- Track 114 : Periwinkle_31, Phistory_30, Apricot_28, Horus_29, Frickyeah_28, Leroy_29
- Track 115 : Phabuloso_28, Lutum_29, Kenna_28
- Track 116 : LitninMcQueen_28
- Track 117 : ShawBrad_29, Crater_27
- Track 118 : Asapag_29
- Track 119 : Squiddly_31, Spooky_29
- Track 120 : Forza_104, Boopy_104, Mareelih_102
- Track 121 : BlueNGold_103
- Track 122 : Sixama_102
- Track 123 : Sephiroth_30
- Track 124 : Syleon_30
- Track 125 : Kundefre_29
- Track 126 : Rabbitrun_32
- Track 127 : Trax_30, Neville_30
- Track 128 : Malibo_28
- Track 129 : DonkeyMan_25
- Track 130 : Reyja_26

- Track 131 : Heinz_26, Hibiscus_25
- Track 132 : Santhid_25
- Track 133 : Tarzan_25
- Track 134 : Jojo24_25
- Track 135 : Crossroads_20, Zakai_20, MkaliMitinis3_20, Finemlucis_20
- Track 136 : Nicholasp3_20, LilDestine_20, Wilder_20, Kahlid_20, Underpass_20, Gardann_20
- Track 137 : Rumpelstiltskin_20
- Track 138 : Bazzle_20
- Track 139 : Gabriela_20, Netyap_20, BobsGarage_20, Miley16_20, DrSeegs_20
- Track 140 : Loadrie_20
- Track 141 : DanBing_19
- Track 142 : Wigglewiggles_20, Hafay_20, Soap141_20, Sarshaun_20
- Track 143 : Winky_20, Breezona_20, Faith1_20, Itos_20
- Track 144 : DHan_20
- Track 145 : Vetrix_20
- Track 146 : Baoshan_19, ZhongYanYuan_19
- Track 147 : Tourach_20
- Track 148 : BigCheese_20
- Track 149 : Archie_20
- Track 150 : GuuelaD_20
- Track 151 : Claus_20
- Track 152 : Lewan_20
- Track 153 : TinyDot_26
- Track 154 : Finkle_23
- Track 155 : GAL1_28

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

The start number called the most often in the published annotations is 29, it was called in 37 of the 275 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Affeca_36, Ailee_35, Angelicage_36, Bibwit_37, BobBob_35, Brandonk123_39, Charming_38, CherryCola_37, Evamon_33, Fireball_34, Fosterous_36, Galadriel_38, Gezellig_34, Halo3_34, Jambalaya_33, Kamashten_36, Keitabear_38, KimmyK_35, Lennon_38, Love_41, McKinley_40, Nordenberg_32, Nubi_33, Paries_40, Phlop_33, PullumCavea_33, Rofo_38, Salvador_33, Savbucketdawg_33, Sedona_38, Shivanishola_38, Sitar_38, SmokingBunny_33, Tangent_38, Thing3_36, TillyBobJoe_33, Togo_33, Valary_36, Vivi2_40, Wizard_33,

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

-

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

- Abscondus_55, Agueybana_27, AlumE_27, Anaysia_33, Angelique_29, Anthony_30, Antonio_28, Aphelion_56, Apricot_28, Archie_20, Asapag_29, Ashertheman_37, Astro_28, Attis_25, Bachita_58, Baddon_36, Baoshan_19, Barsten_37, BatStarr_26, Battleship_34, Baumdotcom_36, BaxterFox_26, Bazzle_20, BearBQ_28, Beenie_26, Beyoncage_25, Bialota_26, BigCheese_20, Birdsong_28,

BiteSize_25, Bizzy_37, Bjaner7_25, BlueNGold_103, BobsGarage_20, Boohoo_33, Boopy_104, Bosnia_26, BoyNamedSue_27, Bradissa_28, Breezona_20, BritBrat_28, BrutonGaster_45, Budski_29, Bunnybear_25, Camerico_31, ChadMasterC_37, Clap_25, Claus_20, ClubL_56, Crater_27, Crossroads_20, Cucurbita_58, Culver_61, Cynthia_25, DHan_20, DanBing_19, Danforth_27, DekHockey33_33, Denise_23, Derg_34, Dixon_28, Djokovic_25, DonkeyMan_25, DrSeegs_20, Dusty_54, EMSquaredA_28, Ebert_25, Ecliptus_32, EdnaMode_24, EnalisNailo_28, Engineer_58, Epsocamisio_33, Eudoria_28, Eviarto_26, Expelliarmus_27, Faith1_20, Faith5x5_24, Finemlucis_20, Finkle_23, Fitzgerald_35, Flatwoods_37, Floral_28, Forza_104, Frickyeah_28, FroggyToad_25, FuegoCuervo_39, GAL1_28, Gabriela_20, Gaea_36, Gardann_20, Geeche_55, GemG_25, Geodirt_35, Getalong_30, Gibbles_26, Gizermo_25, GodonK_92, Groundhog_27, Gustavo_36, GuuelaD_20, Hafay_20, Haley23_25, Heinz_26, Herbertwm_29, Herod_26, Hibiscus_25, Holliday_29, Horus_29, Hugley_26, Hyzer_28, Itos_20, JCole_23, JKSyngboy_34, JSwag_33, Jabberwocky_35, Jojo24_25, JonJames_55, Kahlid_20, Kamaru_29, Kampe_27, KatherineG_33, Kenna_28, Kewpiedoll_36, Kita_28, Kroos_37, Kudrefre_29, Kuwabara_28, Kwobi_37, Lamberg_24, LastResort_33, Leroy_29, Lewan_20, LilDestine_20, LilHam_34, Lilas_28, LilyPad_26, LitninMcQueen_28, LittleFella_27, Loadrie_20, Looper_34, LordFarquaad_25, Lozinak_57, Lton_24, Lucky10_25, Lutum_29, Madeline_26, Madi_25, Malibo_28, Manasvini_28, Mareelih_102, Maridalia_27, Marteena_28, Matteo_24, Miley16_20, MinecraftSteve_34, Miskis_58, MkaliMitinis3_20, Mocha12_25, MoontowerMania_36, Moosehead_24, Morkie_25, MortyNRick_28, Mutzi_35, NearlyHeadless_28, Nebulosus_33, Nedarya_32, Neobush_28, Nettuno_24, Netyap_20, Neville_30, Nicholasp3_20, Norvs_57, Nymphadora_26, ODay_33, Ohgeesy_26, OneDirection_23, OneUp_50, Oofda_34, Orchid_27, PP_40, PantheRoc_27, PatrickStar_27, Pepperoni_25, Periwinkle_31, Phabuloso_28, Phendrix_89, Phillis_28, PhinkBoden_56, Phistory_30, PhorbesPhlower_25, Pickett_24, Pollux_28, Polly_25, Powerball_24, Rabbitrun_32, ReMo_33, Remus_33, Reyja_26, Ribeye_37, RiverRaider_37, Roary_28, RobinSparkles_30, Rosalind_33, Rumpelstiltskin_20, Sahara_24, Saintus_28, Sanjuju_35, Santhid_25, Saronaya_36, Sarshaun_20, Savage_25, Schmidt_27, SchottB_35, Sephiroth_30, ShawBrad_29, ShayRa_34, Sidious_27, Sienna_25, Sixama_102, Smeadley_28, Smoothie_58, Soap141_20, SoilAssassin_25, Soups_33, Spooky_29, Sproutie_25, Squiddly_31, Stephig9_28, StorminNorm_36, Strosahl_33, Stultus_35, Suerte_24, Suscepit_28, Suzy_25, Switzerland_33, Syleon_30, Tangerine_36, Tarzan_25, Tayonia_28, Terapin_25, ThankyouJordi_25, Thimann_26, TimTam_26, TinyDot_26, Toniann_56, Tourach_20, Trax_30, Trine_24, Trumpet_28, TuertoX_25, Tycho_36, Underpass_20, Upyo_24, Vasanti_24, Vatrix_20, Waits_33, Warrior24_34, WelcomeAyanna_25, Whiteclaw_25, Whitney_30, Wigglewiggle_20, Wilder_20, WilliamBoone_56, Winky_20, Yeet412_25, Yeezy_28, YorkOnyx_37, Yvonnetastic_53, Zakai_20, Zameen_28, ZhongYanYuan_19, Zirinka_26,

Summary by start number:

Start 18:

- Found in 2 of 312 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Herbertwm_29 (A2), PP_40 (A7),

Start 19:

- Found in 8 of 312 (2.6%) of genes in pham

- Manual Annotations of this start: 8 of 275
- 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 21:

- Found in 1 of 312 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GAL1_28 (singleton),

Start 22:

- Found in 9 of 312 (2.9%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Angelique_29 (CY1),

Start 23:

- Found in 1 of 312 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mutzi_35 (DC1),

Start 24:

- Found in 2 of 312 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Spooky_29 (DN2), Squiddly_31 (DN2),

Start 26:

- Found in 7 of 312 (2.2%) of genes in pham
- Manual Annotations of this start: 7 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beyoncage_25 (DG1), BiteSize_25 (DG1), Djokovic_25 (DG1), Madi_25 (DG1), Sienna_25 (DG1), Suzy_25 (DG1), Terapin_25 (DG1),

Start 29:

- Found in 40 of 312 (12.8%) of genes in pham
- Manual Annotations of this start: 37 of 275
- Called 100.0% 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), CherryCola_37 (DC1), Evamon_33 (DC1), Fireball_34 (DC1), Fosterous_36 (DE1), Galadriel_38 (DE1), Gezellig_34 (DC1), Halo3_34 (DC1), Jambalaya_33 (DC1), Kamashten_36 (DE1), Keitabear_38 (DE1), KimmyK_35 (DC1), Lennon_38 (DE1), Love_41 (DE1), McKinley_40 (DE1), Nordenberg_32 (DE1), Nubi_33 (DC1), Paries_40 (DE1), Phlop_33 (DC1), PullumCavea_33 (DC1), Rofo_38 (DE1), Salvador_33 (DC1), Savbucketdawg_33 (DC1), Sedona_38 (DE1), Shivanishola_38 (DE1), Sitar_38 (DE1), SmokingBunny_33 (DC1), Tangent_38 (DE1), Thing3_36 (DE1), TillyBobJoe_33 (DC1), Togo_33 (DC1), Valary_36 (DC1), Vivi2_40 (DE1), Wizard_33 (DC1),

Start 34:

- Found in 24 of 312 (7.7%) of genes in pham
- Manual Annotations of this start: 21 of 275
- 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 39:

- Found in 3 of 312 (1.0%) of genes in pham
- Manual Annotations of this start: 3 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lucky10_25 (DH), Morkie_25 (DH), PhorbesPhlower_25 (DH),

Start 45:

- Found in 22 of 312 (7.1%) of genes in pham
- Manual Annotations of this start: 20 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anaysia_33 (A15), Battleship_34 (A15), Boohoo_33 (A15), DekHockey33_33 (A15), Epsocamisio_33 (A15), JSwag_33 (A15), KatherineG_33 (A15), LastResort_33 (A15), Looper_34 (A15), MinecraftSteve_34 (A15), Nebulosus_33 (A15), Nedarya_32 (A15), Oofda_34 (A15), ReMo_33 (A15), Remus_33 (A15), Rosalind_33 (A15), ShayRa_34 (A15), Soups_33 (A15), Strosahl_33 (A15), Switzerland_33 (A15), Waits_33 (A15), Warrior24_34 (A15),

Start 47:

- Found in 25 of 312 (8.0%) of genes in pham
- Manual Annotations of this start: 14 of 275
- Called 72.0% of time when present
- Phage (with cluster) where this start called: Abscondus_55 (CQ1), Aphelion_56 (CQ1), Bachita_58 (CQ1), BrutonGaster_45 (CQ2), ClubL_56 (CQ1), Cucurbita_58 (CQ1), Culver_61 (CQ1), Dusty_54 (CQ1), Engineer_58 (CQ1), Geeche_55 (CQ1), Lozinak_57 (CQ1), Miskis_58 (CQ1), Norvs_57 (CQ1), OneUp_50 (CQ2), PhinkBoden_56 (CQ1), Smoothie_58 (CQ1), Toniann_56 (CQ1), WilliamBoone_56 (CQ1),

Start 52:

- Found in 31 of 312 (9.9%) of genes in pham
- Manual Annotations of this start: 5 of 275
- Called 16.1% 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 53:

- Found in 37 of 312 (11.9%) of genes in pham
- Manual Annotations of this start: 23 of 275
- Called 86.5% 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), Miley16_20 (L2), MkaliMitinis3_20 (L2), Netyap_20 (L2), Nicholasp3_20 (L2), Sarshaun_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 55:

- Found in 3 of 312 (1.0%) of genes in pham
- Manual Annotations of this start: 2 of 275
- Called 66.7% of time when present
- Phage (with cluster) where this start called: JonJames_55 (DD), Yvonnetastic_53 (DD),

Start 65:

- Found in 2 of 312 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilyPad_26 (DG1), LittleFella_27 (DG2),

Start 68:

- Found in 16 of 312 (5.1%) of genes in pham
- Manual Annotations of this start: 11 of 275
- Called 68.8% of time when present
- Phage (with cluster) where this start called: Astro_28 (A8), Danforth_27 (A8), Dixon_28 (A8), Expelliarmus_27 (A8), Groundhog_27 (A8), NearlyHeadless_28 (A8), Phillis_28 (A8), Roary_28 (A8), Saintus_28 (A8), Smeadley_28 (A8), Stephig9_28 (A8),

Start 73:

- Found in 23 of 312 (7.4%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 4.3% of time when present
- Phage (with cluster) where this start called: Anthony_30 (A20),

Start 77:

- Found in 7 of 312 (2.2%) of genes in pham
- Manual Annotations of this start: 6 of 275
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Boopy_104 (DS), Forza_104 (DS), GodonK_92 (DK), Malibo_28 (DW), Mareelih_102 (DS), Phendrix_89 (DK),

Start 78:

- Found in 2 of 312 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Sixama_102 (DS),

Start 84:

- Found in 1 of 312 (0.3%) of genes in pham
- No Manual Annotations of this start.

- Called 100.0% of time when present
- Phage (with cluster) where this start called: DonkeyMan_25 (DY),

Start 86:

- Found in 1 of 312 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Reyja_26 (DY),

Start 87:

- Found in 3 of 312 (1.0%) of genes in pham
- Manual Annotations of this start: 3 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jojo24_25 (DY), Santhid_25 (DY), Tarzan_25 (DY),

Start 92:

- Found in 30 of 312 (9.6%) of genes in pham
- Manual Annotations of this start: 22 of 275
- 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_34 (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_37 (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 97:

- Found in 1 of 312 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bunnybear_25 (CZ),

Start 98:

- Found in 10 of 312 (3.2%) of genes in pham
- Manual Annotations of this start: 9 of 275
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Beenie_26 (CZ4), Kudfre_29 (DU1), Neville_30 (DU2), Powerball_24 (CZ4), Sephiroth_30 (DU1), Suerte_24 (CZ4), Syleon_30 (DU1), Thimann_26 (CZ4), Trax_30 (DU2),

Start 100:

- Found in 5 of 312 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 20.0% of time when present
- Phage (with cluster) where this start called: BlueNGold_103 (DS),

Start 102:

- Found in 1 of 312 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Rabbitrun_32 (DU2),

Start 130:

- Found in 13 of 312 (4.2%) of genes in pham
- Manual Annotations of this start: 5 of 275
- Called 38.5% 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 137:

- Found in 1 of 312 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finkle_23 (singleton),

Start 141:

- Found in 11 of 312 (3.5%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Denise_23 (CZ5),

Start 146:

- Found in 25 of 312 (8.0%) of genes in pham
- Manual Annotations of this start: 5 of 275
- Called 28.0% 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 148:

- Found in 1 of 312 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JCole_23 (CZ2),

Start 149:

- Found in 29 of 312 (9.3%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 3.4% of time when present
- Phage (with cluster) where this start called: Pickett_24 (CZ2),

Start 153:

- Found in 3 of 312 (1.0%) of genes in pham
- Manual Annotations of this start: 3 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EdnaMode_24 (CZ2), Lamberg_24 (CZ2), Nettuno_24 (CZ2),

Start 164:

- Found in 3 of 312 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Hyzer_28 (CZ1), Sidious_27 (CZ7),

Start 179:

- Found in 23 of 312 (7.4%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 4.3% of time when present
- Phage (with cluster) where this start called: Camerico_31 (DF),

Start 181:

- Found in 2 of 312 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trine_24 (CD), Upyo_24 (CD),

Start 183:

- Found in 2 of 312 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Heinz_26 (DY), Hibiscus_25 (DY),

Start 190:

- Found in 13 of 312 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Schmidt_27 (CU4),

Start 194:

- Found in 30 of 312 (9.6%) of genes in pham
- Manual Annotations of this start: 29 of 275
- 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), 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 199:

- Found in 19 of 312 (6.1%) of genes in pham
- Manual Annotations of this start: 19 of 275
- 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), 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),

Summary by clusters:

There are 40 clusters represented in this pham: DN, singleton, DK, DH, CZ2, CZ3, DD, CZ1, CZ6, CZ7, CZ4, CZ5, DY, DW, DS, A15, CU4, DN4, DF, A2, DN1, DN3,

DN2, A8, DU2, CY2, CY1, A7, CD, DG2, CZ, CX, L2, DU1, CQ1, DC1, A20, CQ2, DE1, DG1,

Info for manual annotations of cluster A15:

- Start number 45 was manually annotated 20 times for cluster A15.

Info for manual annotations of cluster A2:

- Start number 18 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A20:

- Start number 73 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A7:

- Start number 18 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A8:

- Start number 68 was manually annotated 11 times for cluster A8.

Info for manual annotations of cluster CD:

- Start number 181 was manually annotated 2 times for cluster CD.

Info for manual annotations of cluster CQ1:

- Start number 47 was manually annotated 12 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 47 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster CU4:

- Start number 190 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CX:

- Start number 130 was manually annotated 5 times for cluster CX.

Info for manual annotations of cluster CY1:

- Start number 19 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 19 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ:

- Start number 97 was manually annotated 1 time for cluster CZ.
- Start number 146 was manually annotated 1 time for cluster CZ.
- Start number 194 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 194 was manually annotated 25 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 146 was manually annotated 1 time for cluster CZ2.
- Start number 149 was manually annotated 1 time for cluster CZ2.
- Start number 153 was manually annotated 3 times for cluster CZ2.
- Start number 199 was manually annotated 18 times for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 194 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ4:

- Start number 98 was manually annotated 4 times for cluster CZ4.

Info for manual annotations of cluster CZ5:

- Start number 141 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 146 was manually annotated 2 times for cluster CZ6.
- Start number 199 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster CZ7:

- Start number 164 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DC1:

- Start number 23 was manually annotated 1 time for cluster DC1.
- Start number 29 was manually annotated 15 times for cluster DC1.

Info for manual annotations of cluster DD:

- Start number 55 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DE1:

- Start number 29 was manually annotated 22 times for cluster DE1.
- Start number 92 was manually annotated 22 times for cluster DE1.

Info for manual annotations of cluster DF:

- Start number 179 was manually annotated 1 time for cluster DF.

Info for manual annotations of cluster DG1:

- Start number 26 was manually annotated 7 times for cluster DG1.
- Start number 65 was manually annotated 1 time for cluster DG1.

Info for manual annotations of cluster DG2:

- Start number 65 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster DH:

- Start number 39 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DK:

- Start number 77 was manually annotated 2 times for cluster DK.

Info for manual annotations of cluster DN:

- Start number 34 was manually annotated 5 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 34 was manually annotated 13 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 24 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 34 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 34 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DS:

- Start number 77 was manually annotated 3 times for cluster DS.
- Start number 78 was manually annotated 1 time for cluster DS.
- Start number 100 was manually annotated 1 time for cluster DS.

Info for manual annotations of cluster DU1:

- Start number 98 was manually annotated 3 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 98 was manually annotated 2 times for cluster DU2.
- Start number 102 was manually annotated 1 time for cluster DU2.

Info for manual annotations of cluster DW:

- Start number 77 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster DY:

- Start number 86 was manually annotated 1 time for cluster DY.
- Start number 87 was manually annotated 3 times for cluster DY.
- Start number 183 was manually annotated 1 time for cluster DY.

Info for manual annotations of cluster L2:

- Start number 52 was manually annotated 5 times for cluster L2.
- Start number 53 was manually annotated 23 times for cluster L2.

Gene Information:

Gene: Abscondus_55 Start: 35127, Stop: 36959, Start Num: 47

Candidate Starts for Abscondus_55:

(Start: 47 @35127 has 14 MA's), (94, 35232), (99, 35241), (131, 35295), (172, 35385), (187, 35421), (196, 35442), (201, 35445), (233, 35526), (255, 35595), (353, 35865), (394, 36027), (428, 36111), (430, 36117), (465, 36237), (523, 36513), (534, 36570), (536, 36576), (588, 36720), (607, 36804), (627, 36873),

Gene: Affeca_36 Start: 33574, Stop: 35496, Start Num: 29

Candidate Starts for Affeca_36:

(Start: 29 @33574 has 37 MA's), (69, 33709), (Start: 73 @33718 has 1 MA's), (90, 33751), (101, 33775), (135, 33844), (167, 33919), (232, 34111), (234, 34117), (243, 34138), (247, 34156), (250, 34168), (272, 34228), (292, 34282), (345, 34396), (369, 34483), (381, 34537), (397, 34603), (408, 34633), (415, 34645), (430, 34690), (432, 34702), (436, 34720), (447, 34747), (468, 34825), (477, 34852), (485, 34876), (508, 34999), (514, 35041), (539, 35125), (547, 35155), (580, 35236), (592, 35266), (606, 35338), (611, 35347),

Gene: Agueybana_27 Start: 22803, Stop: 24308, Start Num: 194

Candidate Starts for Agueybana_27:

(108, 22596), (144, 22665), (Start: 146 @22668 has 5 MA's), (158, 22692), (161, 22698), (Start: 194 @22803 has 29 MA's), (218, 22872), (222, 22884), (254, 22995), (257, 23001), (259, 23007), (261, 23013), (289, 23100), (302, 23136), (303, 23142), (307, 23151), (397, 23445), (421, 23499), (422, 23502), (430, 23523), (473, 23673), (497, 23757), (508, 23838), (509, 23841), (571, 24060), (589, 24108), (602, 24168), (617, 24201), (620, 24207), (634, 24279),

Gene: Ailee_35 Start: 33459, Stop: 35381, Start Num: 29

Candidate Starts for Ailee_35:

(Start: 29 @33459 has 37 MA's), (69, 33594), (90, 33636), (101, 33660), (167, 33804), (232, 33996), (234, 34002), (243, 34023), (247, 34041), (250, 34053), (272, 34113), (292, 34167), (345, 34281), (369, 34368), (381, 34422), (393, 34476), (397, 34488), (408, 34518), (415, 34530), (430, 34575), (432, 34587), (436, 34605), (447, 34632), (468, 34710), (477, 34737), (485, 34761), (508, 34884), (514, 34926), (539, 35010), (547, 35040), (580, 35121), (592, 35151), (606, 35223), (611, 35232),

Gene: AlumE_27 Start: 22802, Stop: 24307, Start Num: 194

Candidate Starts for AlumE_27:

(108, 22595), (144, 22664), (Start: 146 @22667 has 5 MA's), (158, 22691), (161, 22697), (Start: 194 @22802 has 29 MA's), (218, 22871), (222, 22883), (254, 22994), (257, 23000), (259, 23006), (261, 23012), (289, 23099), (302, 23135), (303, 23141), (307, 23150), (342, 23234), (397, 23444), (421, 23498), (422, 23501), (430, 23522), (443, 23567), (473, 23672), (497, 23756), (508, 23837), (509, 23840), (535, 23963), (571, 24059), (589, 24107), (595, 24122), (602, 24167), (617, 24200), (620, 24206), (634, 24278),

Gene: Anaysia_33 Start: 21746, Stop: 23458, Start Num: 45

Candidate Starts for Anaysia_33:

(Start: 45 @21746 has 20 MA's), (82, 21839), (155, 21989), (169, 22028), (Start: 179 @22058 has 1 MA's), (233, 22184), (234, 22187), (281, 22325), (298, 22382), (342, 22427), (359, 22433), (376, 22499), (386, 22553), (428, 22667), (432, 22685), (436, 22703), (461, 22760), (505, 22937), (536, 23096), (547, 23132), (590, 23249), (600, 23300), (621, 23360), (627, 23396), (638, 23444),

Gene: Angelicage_36 Start: 33992, Stop: 35914, Start Num: 29

Candidate Starts for Angelicage_36:

(Start: 29 @33992 has 37 MA's), (69, 34127), (Start: 73 @34136 has 1 MA's), (90, 34169), (101, 34193), (135, 34262), (167, 34337), (232, 34529), (234, 34535), (243, 34556), (247, 34574), (250, 34586), (272, 34646), (292, 34700), (345, 34814), (369, 34901), (381, 34955), (397, 35021), (408, 35051), (415, 35063), (430, 35108), (432, 35120), (436, 35138), (447, 35165), (468, 35243), (477, 35270), (485, 35294), (508, 35417), (514, 35459), (539, 35543), (547, 35573), (580, 35654), (592, 35684), (606, 35756), (611, 35765),

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

Candidate Starts for Angelique_29:

(3, 23168), (10, 23276), (11, 23279), (12, 23303), (13, 23309), (Start: 22 @23414 has 1 MA's), (32, 23468), (33, 23471), (56, 23558), (118, 23699), (162, 23777), (172, 23816), (214, 23918), (219, 23930), (232, 23975), (243, 24002), (246, 24017), (266, 24071), (272, 24092), (277, 24104), (290, 24140), (350, 24269), (369, 24335), (371, 24338), (377, 24368), (404, 24467), (408, 24479), (415, 24491), (432, 24548), (441, 24581), (444, 24587), (477, 24698), (515, 24890), (547, 25001), (635, 25301),

Gene: Anthony_30 Start: 21219, Stop: 22928, Start Num: 73

Candidate Starts for Anthony_30:

(Start: 73 @21219 has 1 MA's), (147, 21366), (155, 21381), (166, 21408), (186, 21456), (207, 21513), (328, 21867), (356, 21930), (370, 21966), (396, 22080), (429, 22158), (439, 22197), (453, 22224), (457, 22242), (486, 22332), (487, 22335), (489, 22350), (528, 22536), (545, 22596), (557, 22623),

(562, 22638), (578, 22683), (586, 22701), (599, 22764), (601, 22770), (629, 22872),

Gene: Antonio_28 Start: 22923, Stop: 24428, Start Num: 194

Candidate Starts for Antonio_28:

(Start: 194 @22923 has 29 MA's), (218, 22992), (222, 23004), (254, 23115), (259, 23127), (261, 23133), (289, 23220), (302, 23256), (303, 23262), (307, 23271), (397, 23565), (421, 23619), (422, 23622), (430, 23643), (443, 23688), (473, 23793), (497, 23877), (508, 23958), (509, 23961), (535, 24084), (571, 24180), (589, 24228), (602, 24288), (617, 24321), (620, 24327), (634, 24399),

Gene: Aphelion_56 Start: 35396, Stop: 37228, Start Num: 47

Candidate Starts for Aphelion_56:

(Start: 47 @35396 has 14 MA's), (94, 35501), (99, 35510), (131, 35564), (172, 35654), (188, 35693), (196, 35711), (233, 35795), (255, 35864), (353, 36134), (394, 36296), (428, 36380), (430, 36386), (465, 36506), (523, 36782), (534, 36839), (536, 36845), (577, 36962), (588, 36989), (607, 37073), (627, 37142),

Gene: Apricot_28 Start: 21679, Stop: 23514, Start Num: 34

Candidate Starts for Apricot_28:

(Start: 34 @21679 has 21 MA's), (90, 21841), (103, 21871), (129, 21925), (138, 21940), (143, 21952), (145, 21955), (152, 21970), (154, 21973), (155, 21976), (192, 22066), (196, 22075), (197, 22078), (226, 22165), (232, 22186), (234, 22192), (243, 22213), (244, 22222), (250, 22243), (252, 22249), (306, 22351), (307, 22354), (325, 22384), (330, 22396), (345, 22420), (347, 22429), (369, 22495), (374, 22507), (381, 22549), (387, 22582), (397, 22615), (400, 22621), (408, 22645), (415, 22657), (432, 22714), (436, 22732), (477, 22864), (485, 22888), (488, 22906), (515, 23059), (520, 23074), (522, 23089), (524, 23095), (539, 23140), (543, 23158), (547, 23170), (549, 23176), (557, 23188), (561, 23197), (580, 23251), (598, 23320), (606, 23353), (609, 23359), (625, 23422), (626, 23425), (629, 23443), (635, 23464), (636, 23473),

Gene: Archie_20 Start: 19444, Stop: 21240, Start Num: 53

Candidate Starts for Archie_20:

(Start: 52 @19441 has 5 MA's), (Start: 53 @19444 has 23 MA's), (93, 19540), (121, 19597), (136, 19621), (152, 19657), (172, 19717), (176, 19726), (186, 19750), (195, 19771), (214, 19828), (241, 19921), (248, 19945), (259, 19975), (278, 20029), (290, 20074), (311, 20125), (354, 20230), (373, 20284), (386, 20362), (390, 20371), (406, 20419), (407, 20422), (409, 20425), (420, 20449), (436, 20509), (440, 20518), (486, 20656), (487, 20659), (508, 20788), (520, 20827), (523, 20842), (538, 20902), (544, 20911), (556, 20938), (567, 20971), (573, 20986), (610, 21112), (618, 21136), (637, 21223),

Gene: Asapag_29 Start: 22121, Stop: 23956, Start Num: 34

Candidate Starts for Asapag_29:

(Start: 34 @22121 has 21 MA's), (90, 22283), (103, 22313), (129, 22367), (138, 22382), (143, 22394), (145, 22397), (152, 22412), (154, 22415), (155, 22418), (192, 22508), (196, 22517), (197, 22520), (226, 22607), (232, 22628), (234, 22634), (243, 22655), (250, 22685), (252, 22691), (306, 22793), (307, 22796), (325, 22826), (330, 22838), (345, 22862), (347, 22871), (369, 22937), (374, 22949), (381, 22991), (387, 23024), (397, 23057), (400, 23063), (408, 23087), (415, 23099), (432, 23156), (436, 23174), (477, 23306), (485, 23330), (488, 23348), (515, 23501), (520, 23516), (522, 23531), (524, 23537), (539, 23582), (543, 23600), (547, 23612), (549, 23618), (557, 23630), (561, 23639), (580, 23693), (598, 23762), (606, 23795), (609, 23801), (625, 23864), (626, 23867), (629, 23885), (635, 23906), (636, 23915),

Gene: Ashertheman_37 Start: 32252, Stop: 33973, Start Num: 92

Candidate Starts for Ashertheman_37:

(Start: 92 @32252 has 22 MA's), (157, 32387), (173, 32444), (177, 32453), (203, 32522), (291, 32783), (310, 32822), (333, 32882), (349, 32927), (367, 32987), (403, 33122), (405, 33128), (421, 33170), (427, 33185), (435, 33221), (446, 33242), (472, 33338), (473, 33341), (497, 33425), (503, 33458), (508, 33503), (509, 33506), (515, 33542), (524, 33578), (526, 33590), (540, 33626), (572, 33716),

Gene: Astro_28 Start: 21515, Stop: 23236, Start Num: 68

Candidate Starts for Astro_28:

(Start: 68 @21515 has 11 MA's), (147, 21659), (196, 21773), (226, 21863), (235, 21899), (243, 21920), (267, 21992), (274, 22016), (290, 22070), (298, 22088), (337, 22172), (373, 22268), (382, 22322), (393, 22370), (440, 22499), (449, 22517), (487, 22643), (528, 22847), (529, 22856), (558, 22937), (593, 23033), (619, 23132), (638, 23219),

Gene: Attis_25 Start: 20498, Stop: 22021, Start Num: 199

Candidate Starts for Attis_25:

(Start: 199 @20498 has 19 MA's), (227, 20570), (230, 20582), (238, 20609), (246, 20633), (286, 20753), (288, 20762), (313, 20828), (357, 20942), (371, 20984), (377, 21014), (383, 21044), (404, 21110), (415, 21134), (422, 21158), (430, 21176), (432, 21188), (436, 21206), (441, 21221), (444, 21227), (460, 21278), (467, 21305), (485, 21356), (512, 21524), (518, 21545), (534, 21623), (545, 21662), (554, 21683), (555, 21686), (559, 21698), (572, 21737), (612, 21884), (625, 21944), (626, 21947),

Gene: Bachita_58 Start: 35829, Stop: 37661, Start Num: 47

Candidate Starts for Bachita_58:

(Start: 47 @35829 has 14 MA's), (94, 35934), (99, 35943), (131, 35997), (172, 36087), (188, 36126), (196, 36144), (233, 36228), (255, 36297), (353, 36567), (394, 36729), (428, 36813), (430, 36819), (465, 36939), (523, 37215), (534, 37272), (536, 37278), (577, 37395), (588, 37422), (607, 37506), (627, 37575),

Gene: Baddon_36 Start: 33049, Stop: 34770, Start Num: 92

Candidate Starts for Baddon_36:

(Start: 92 @33049 has 22 MA's), (151, 33172), (157, 33184), (177, 33250), (203, 33319), (219, 33355), (291, 33580), (310, 33619), (333, 33679), (349, 33724), (367, 33784), (403, 33919), (405, 33925), (421, 33967), (427, 33982), (435, 34018), (446, 34039), (473, 34138), (497, 34222), (503, 34255), (508, 34300), (509, 34303), (515, 34339), (524, 34375), (526, 34387), (540, 34423), (553, 34459), (572, 34513),

Gene: Baoshan_19 Start: 19053, Stop: 20849, Start Num: 53

Candidate Starts for Baoshan_19:

(Start: 53 @19053 has 23 MA's), (105, 19173), (111, 19194), (121, 19206), (136, 19230), (147, 19257), (172, 19326), (176, 19335), (189, 19368), (195, 19380), (203, 19410), (214, 19437), (248, 19554), (265, 19602), (278, 19638), (290, 19683), (311, 19734), (354, 19839), (362, 19857), (372, 19890), (373, 19893), (378, 19932), (386, 19971), (407, 20031), (409, 20034), (436, 20118), (486, 20265), (502, 20343), (520, 20436), (523, 20451), (538, 20511), (544, 20520), (556, 20547), (573, 20595), (578, 20610), (600, 20694), (601, 20697), (618, 20745), (623, 20760), (637, 20832),

Gene: Barsten_37 Start: 32600, Stop: 34321, Start Num: 92

Candidate Starts for Barsten_37:

(Start: 92 @32600 has 22 MA's), (157, 32735), (162, 32744), (170, 32777), (177, 32801), (203, 32870), (216, 32900), (229, 32945), (291, 33131), (310, 33170), (312, 33179), (341, 33251), (349, 33275), (371, 33347), (391, 33434), (403, 33470), (405, 33476), (421, 33518), (427, 33533), (430, 33542), (473, 33689), (497, 33773), (503, 33806), (509, 33854), (522, 33920), (524, 33926), (526, 33938), (537, 33968), (540, 33974), (553, 34010), (557, 34019), (572, 34064),

Gene: BatStarr_26 Start: 22926, Stop: 24431, Start Num: 194

Candidate Starts for BatStarr_26:

(60, 22611), (108, 22719), (144, 22788), (Start: 146 @22791 has 5 MA's), (158, 22815), (161, 22821), (Start: 194 @22926 has 29 MA's), (218, 22995), (222, 23007), (254, 23118), (257, 23124), (259, 23130), (261, 23136), (289, 23223), (302, 23259), (303, 23265), (307, 23274), (397, 23568), (421, 23622), (422, 23625), (430, 23646), (443, 23691), (473, 23796), (497, 23880), (508, 23961), (509, 23964), (571, 24183), (589, 24231), (602, 24291), (617, 24324), (620, 24330), (634, 24402),

Gene: Battleship_34 Start: 21858, Stop: 23570, Start Num: 45

Candidate Starts for Battleship_34:

(Start: 45 @21858 has 20 MA's), (82, 21951), (155, 22101), (169, 22140), (Start: 179 @22170 has 1 MA's), (233, 22296), (234, 22299), (281, 22437), (298, 22494), (342, 22539), (359, 22545), (376, 22611), (386, 22665), (428, 22779), (432, 22797), (436, 22815), (461, 22872), (505, 23049), (536, 23208), (547, 23244), (590, 23361), (600, 23412), (621, 23472), (627, 23508), (638, 23556),

Gene: Baumdotcom_36 Start: 31904, Stop: 33625, Start Num: 92

Candidate Starts for Baumdotcom_36:

(Start: 92 @31904 has 22 MA's), (151, 32027), (157, 32039), (177, 32105), (203, 32174), (291, 32435), (295, 32444), (310, 32474), (333, 32534), (349, 32579), (367, 32639), (403, 32774), (405, 32780), (421, 32822), (427, 32837), (435, 32873), (446, 32894), (473, 32993), (497, 33077), (503, 33110), (508, 33155), (509, 33158), (515, 33194), (524, 33230), (526, 33242), (540, 33278), (572, 33368),

Gene: BaxterFox_26 Start: 22126, Stop: 23631, Start Num: 194

Candidate Starts for BaxterFox_26:

(Start: 194 @22126 has 29 MA's), (213, 22183), (218, 22195), (222, 22207), (254, 22318), (257, 22324), (259, 22330), (261, 22336), (289, 22423), (302, 22459), (303, 22465), (307, 22474), (391, 22738), (397, 22768), (412, 22795), (421, 22822), (422, 22825), (430, 22846), (444, 22894), (450, 22906), (473, 22996), (497, 23080), (509, 23164), (535, 23287), (571, 23383), (589, 23431), (602, 23491), (617, 23524), (620, 23530), (634, 23602),

Gene: Bazzle_20 Start: 19193, Stop: 20989, Start Num: 53

Candidate Starts for Bazzle_20:

(Start: 52 @19190 has 5 MA's), (Start: 53 @19193 has 23 MA's), (121, 19346), (136, 19370), (152, 19406), (172, 19466), (176, 19475), (186, 19499), (195, 19520), (214, 19577), (241, 19670), (248, 19694), (259, 19724), (278, 19778), (290, 19823), (311, 19874), (354, 19979), (373, 20033), (386, 20111), (390, 20120), (406, 20168), (407, 20171), (409, 20174), (420, 20198), (436, 20258), (440, 20267), (486, 20405), (487, 20408), (508, 20537), (520, 20576), (523, 20591), (538, 20651), (544, 20660), (556, 20687), (567, 20720), (573, 20735), (610, 20861), (618, 20885), (637, 20972),

Gene: BearBQ_28 Start: 22958, Stop: 24742, Start Num: 34

Candidate Starts for BearBQ_28:

(Start: 34 @22958 has 21 MA's), (38, 22973), (48, 23000), (59, 23030), (91, 23102), (96, 23114), (Start: 130 @23177 has 5 MA's), (138, 23189), (161, 23231), (178, 23270), (185, 23279), (214, 23357), (232, 23414), (234, 23420), (243, 23441), (244, 23450), (250, 23471), (252, 23477), (306, 23579), (307, 23582), (325, 23612), (330, 23624), (345, 23648), (347, 23657), (369, 23723), (374, 23735), (381, 23777), (387, 23810), (397, 23843), (400, 23849), (408, 23873), (415, 23885), (432, 23942), (436, 23960), (477, 24092), (485, 24116), (488, 24134), (515, 24287), (520, 24302), (522, 24317), (524, 24323), (539, 24368), (543, 24386), (547, 24398), (549, 24404), (557, 24416), (561, 24425), (580, 24479), (598, 24548), (606, 24581), (609, 24587), (625, 24650), (626, 24653), (629, 24671), (635, 24692), (636, 24701),

Gene: Beenie_26 Start: 22391, Stop: 24076, Start Num: 98

Candidate Starts for Beenie_26:

(Start: 98 @22391 has 9 MA's), (197, 22601), (200, 22607), (205, 22628), (219, 22664), (231, 22706), (232, 22709), (243, 22736), (266, 22805), (272, 22826), (277, 22838), (369, 23066), (377, 23099), (404, 23198), (408, 23210), (415, 23222), (432, 23279), (436, 23297), (441, 23312), (444, 23318), (477, 23429), (488, 23471), (490, 23480), (514, 23618), (515, 23621), (589, 23843),

Gene: Beyoncage_25 Start: 21340, Stop: 23304, Start Num: 26

Candidate Starts for Beyoncage_25:

(Start: 26 @21340 has 7 MA's), (Start: 47 @21421 has 14 MA's), (50, 21430), (64, 21469), (66, 21472), (135, 21604), (156, 21646), (163, 21664), (Start: 190 @21742 has 1 MA's), (212, 21805), (245, 21919), (258, 21955), (271, 21994), (289, 22048), (307, 22099), (348, 22198), (369, 22273), (374, 22285), (386, 22360), (430, 22477), (431, 22480), (433, 22492), (519, 22849), (523, 22867), (534, 22924), (536, 22930), (547, 22966), (549, 22972), (607, 23158), (627, 23227),

Gene: Bialota_26 Start: 22938, Stop: 24443, Start Num: 194

Candidate Starts for Bialota_26:

(60, 22623), (108, 22731), (144, 22800), (Start: 146 @22803 has 5 MA's), (158, 22827), (161, 22833), (Start: 194 @22938 has 29 MA's), (218, 23007), (222, 23019), (254, 23130), (257, 23136), (259, 23142), (261, 23148), (262, 23154), (289, 23235), (302, 23271), (303, 23277), (307, 23286), (397, 23580), (421, 23634), (422, 23637), (430, 23658), (443, 23703), (473, 23808), (497, 23892), (508, 23973), (509, 23976), (571, 24195), (589, 24243), (602, 24303), (617, 24336), (620, 24342), (634, 24414),

Gene: Bibwit_37 Start: 33393, Stop: 35315, Start Num: 29

Candidate Starts for Bibwit_37:

(Start: 29 @33393 has 37 MA's), (69, 33528), (Start: 73 @33537 has 1 MA's), (90, 33570), (101, 33594), (135, 33663), (167, 33738), (232, 33930), (234, 33936), (243, 33957), (247, 33975), (250, 33987), (272, 34047), (292, 34101), (345, 34215), (369, 34302), (381, 34356), (393, 34410), (397, 34422), (408, 34452), (415, 34464), (430, 34509), (432, 34521), (436, 34539), (447, 34566), (468, 34644), (477, 34671), (485, 34695), (508, 34818), (514, 34860), (539, 34944), (547, 34974), (561, 35001), (580, 35055), (592, 35085), (606, 35157), (611, 35166),

Gene: BigCheese_20 Start: 19228, Stop: 21024, Start Num: 53

Candidate Starts for BigCheese_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386, 20146), (406, 20203), (409, 20209), (436, 20293), (440, 20302), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (556, 20722), (562, 20740), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: Birdsong_28 Start: 21851, Stop: 23635, Start Num: 34

Candidate Starts for Birdsong_28:

(Start: 34 @21851 has 21 MA's), (38, 21866), (48, 21893), (59, 21923), (91, 21995), (96, 22007), (Start: 130 @22070 has 5 MA's), (138, 22082), (161, 22124), (178, 22163), (185, 22172), (214, 22250), (232, 22307), (234, 22313), (243, 22334), (244, 22343), (250, 22364), (252, 22370), (306, 22472), (307, 22475), (325, 22505), (330, 22517), (345, 22541), (347, 22550), (369, 22616), (374, 22628), (381, 22670), (387, 22703), (397, 22736), (400, 22742), (408, 22766), (415, 22778), (432, 22835), (436, 22853), (477, 22985), (485, 23009), (488, 23027), (515, 23180), (520, 23195), (522, 23210), (524, 23216), (539, 23261), (543, 23279), (547, 23291), (549, 23297), (557, 23309), (561, 23318), (580, 23372), (598, 23441), (606, 23474), (609, 23480), (625, 23543), (626, 23546), (629, 23564), (635, 23585), (636, 23594),

Gene: BiteSize_25 Start: 21340, Stop: 23304, Start Num: 26

Candidate Starts for BiteSize_25:

(Start: 26 @21340 has 7 MA's), (Start: 47 @21421 has 14 MA's), (50, 21430), (64, 21469), (66, 21472), (135, 21604), (156, 21646), (163, 21664), (Start: 190 @21742 has 1 MA's), (212, 21805), (245, 21919), (258, 21955), (271, 21994), (289, 22048), (307, 22099), (348, 22198), (369, 22273), (374, 22285), (386, 22360), (430, 22477), (431, 22480), (433, 22492), (519, 22849), (523, 22867), (534, 22924), (536, 22930), (547, 22966), (549, 22972), (607, 23158), (627, 23227),

Gene: Bizzy_37 Start: 32196, Stop: 33917, Start Num: 92

Candidate Starts for Bizzy_37:

(Start: 92 @32196 has 22 MA's), (151, 32319), (157, 32331), (177, 32397), (203, 32466), (219, 32502), (229, 32541), (291, 32727), (310, 32766), (333, 32826), (349, 32871), (367, 32931), (403, 33066), (405, 33072), (421, 33114), (427, 33129), (435, 33165), (446, 33186), (473, 33285), (497, 33369), (503, 33402), (508, 33447), (509, 33450), (515, 33486), (524, 33522), (526, 33534), (540, 33570), (553, 33606), (572, 33660),

Gene: Bjaner7_25 Start: 20498, Stop: 22021, Start Num: 199

Candidate Starts for Bjaner7_25:

(Start: 199 @20498 has 19 MA's), (227, 20570), (230, 20582), (238, 20609), (246, 20633), (286, 20753), (288, 20762), (313, 20828), (357, 20942), (371, 20984), (377, 21014), (383, 21044), (404, 21110), (415, 21134), (422, 21158), (430, 21176), (432, 21188), (436, 21206), (441, 21221), (444, 21227), (460, 21278), (467, 21305), (485, 21356), (512, 21524), (518, 21545), (534, 21623), (545, 21662), (554, 21683), (555, 21686), (559, 21698), (572, 21737), (612, 21884), (625, 21944), (626, 21947),

Gene: BlueNGold_103 Start: 62535, Stop: 64172, Start Num: 100

Candidate Starts for BlueNGold_103:

(Start: 68 @62475 has 11 MA's), (Start: 77 @62493 has 6 MA's), (Start: 100 @62535 has 1 MA's), (104, 62544), (142, 62610), (143, 62613), (160, 62634), (201, 62745), (218, 62787), (264, 62925), (272, 62949), (371, 63195), (397, 63312), (411, 63339), (415, 63345), (432, 63399), (444, 63438), (477, 63549), (483, 63564), (485, 63573), (518, 63744), (522, 63765), (549, 63858), (594, 63966), (636, 64143),

Gene: BobBob_35 Start: 32673, Stop: 34526, Start Num: 29

Candidate Starts for BobBob_35:

(Start: 29 @32673 has 37 MA's), (69, 32808), (Start: 73 @32817 has 1 MA's), (90, 32850), (101, 32874), (135, 32943), (Start: 149 @32973 has 1 MA's), (167, 33018), (232, 33210), (234, 33216), (243, 33237), (247, 33255), (250, 33267), (272, 33327), (319, 33393), (369, 33513), (377, 33546), (397, 33633), (408, 33663), (415, 33675), (430, 33720), (432, 33732), (436, 33750), (441, 33765), (451, 33789), (468, 33855), (477, 33882), (485, 33906), (508, 34029), (514, 34071), (539, 34155), (547, 34185), (561, 34212), (580, 34266), (592, 34296), (606, 34368), (611, 34377),

Gene: BobsGarage_20 Start: 19228, Stop: 21024, Start Num: 53

Candidate Starts for BobsGarage_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386, 20146), (406, 20203), (409, 20209), (436, 20293), (440, 20302), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (544, 20695), (556, 20722), (562, 20740), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: Boohoo_33 Start: 21746, Stop: 23458, Start Num: 45

Candidate Starts for Boohoo_33:

(Start: 45 @21746 has 20 MA's), (82, 21839), (155, 21989), (169, 22028), (Start: 179 @22058 has 1 MA's), (233, 22184), (234, 22187), (281, 22325), (298, 22382), (342, 22427), (359, 22433), (376, 22499), (386, 22553), (428, 22667), (432, 22685), (436, 22703), (461, 22760), (505, 22937), (536, 23096), (547, 23132), (590, 23249), (600, 23300), (621, 23360), (627, 23396), (638, 23444),

Gene: Boopy_104 Start: 62505, Stop: 64184, Start Num: 77

Candidate Starts for Boopy_104:

(Start: 68 @62487 has 11 MA's), (Start: 77 @62505 has 6 MA's), (Start: 100 @62547 has 1 MA's), (104, 62556), (142, 62622), (143, 62625), (160, 62646), (201, 62757), (218, 62799), (264, 62937), (272, 62961), (371, 63207), (397, 63324), (411, 63351), (415, 63357), (432, 63411), (444, 63450), (477, 63561), (483, 63576), (485, 63585), (518, 63756), (522, 63777), (549, 63870), (594, 63978), (636, 64155),

Gene: Bosnia_26 Start: 22926, Stop: 24431, Start Num: 194

Candidate Starts for Bosnia_26:

(60, 22611), (108, 22719), (144, 22788), (Start: 146 @22791 has 5 MA's), (158, 22815), (161, 22821), (Start: 194 @22926 has 29 MA's), (218, 22995), (222, 23007), (254, 23118), (257, 23124), (259, 23130), (261, 23136), (289, 23223), (302, 23259), (303, 23265), (307, 23274), (397, 23568), (421, 23622), (422, 23625), (430, 23646), (443, 23691), (473, 23796), (497, 23880), (508, 23961), (509, 23964), (571, 24183), (589, 24231), (602, 24291), (617, 24324), (620, 24330), (634, 24402),

Gene: BoyNamedSue_27 Start: 22802, Stop: 24307, Start Num: 194

Candidate Starts for BoyNamedSue_27:

(108, 22595), (144, 22664), (Start: 146 @22667 has 5 MA's), (158, 22691), (161, 22697), (Start: 194 @22802 has 29 MA's), (218, 22871), (222, 22883), (254, 22994), (257, 23000), (259, 23006), (261, 23012), (289, 23099), (302, 23135), (303, 23141), (307, 23150), (342, 23234), (397, 23444), (421, 23498), (422, 23501), (430, 23522), (443, 23567), (473, 23672), (497, 23756), (508, 23837), (509, 23840), (535, 23963), (571, 24059), (589, 24107), (595, 24122), (602, 24167), (617, 24200), (620, 24206), (634, 24278),

Gene: Bradissa_28 Start: 22770, Stop: 24722, Start Num: 19

Candidate Starts for Bradissa_28:

(1, 22482), (2, 22539), (4, 22554), (6, 22590), (7, 22635), (8, 22638), (Start: 19 @22770 has 8 MA's), (Start: 22 @22785 has 1 MA's), (27, 22824), (28, 22827), (114, 23055), (132, 23082), (Start: 141 @23097 has 1 MA's), (232, 23331), (234, 23337), (238, 23349), (266, 23427), (272, 23448), (320, 23568), (341, 23610), (369, 23703), (374, 23715), (381, 23757), (398, 23829), (408, 23847), (415, 23859), (432, 23916), (441, 23949), (455, 23982), (477, 24066), (484, 24084), (515, 24258), (528, 24312), (598, 24534), (623, 24615), (625, 24636),

Gene: Brandonk123_39 Start: 33739, Stop: 35661, Start Num: 29

Candidate Starts for Brandonk123_39:

(Start: 29 @33739 has 37 MA's), (69, 33874), (Start: 73 @33883 has 1 MA's), (90, 33916), (101, 33940), (135, 34009), (Start: 149 @34039 has 1 MA's), (167, 34084), (232, 34276), (234, 34282), (243, 34303), (247, 34321), (250, 34333), (272, 34393), (292, 34447), (345, 34561), (369, 34648), (381, 34702), (393, 34756), (397, 34768), (408, 34798), (415, 34810), (430, 34855), (432, 34867), (436, 34885), (447, 34912), (468, 34990), (477, 35017), (485, 35041), (508, 35164), (514, 35206), (539, 35290), (547, 35320), (561, 35347), (580, 35401), (592, 35431), (606, 35503), (611, 35512),

Gene: Breezona_20 Start: 19225, Stop: 21024, Start Num: 52

Candidate Starts for Breezona_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386,

20146), (406, 20203), (409, 20209), (436, 20293), (440, 20302), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (544, 20695), (556, 20722), (562, 20740), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: BritBrat_28 Start: 22623, Stop: 24575, Start Num: 19

Candidate Starts for BritBrat_28:

(1, 22335), (2, 22392), (4, 22407), (6, 22443), (7, 22488), (8, 22491), (Start: 19 @22623 has 8 MA's), (Start: 22 @22638 has 1 MA's), (27, 22677), (28, 22680), (114, 22908), (132, 22935), (Start: 141 @22950 has 1 MA's), (232, 23184), (234, 23190), (238, 23202), (266, 23280), (272, 23301), (320, 23421), (341, 23463), (369, 23556), (374, 23568), (381, 23610), (408, 23700), (415, 23712), (432, 23769), (441, 23802), (455, 23835), (469, 23895), (477, 23919), (484, 23937), (515, 24111), (517, 24117), (528, 24165), (598, 24387), (623, 24468), (625, 24489),

Gene: BrutonGaster_45 Start: 32466, Stop: 34274, Start Num: 47

Candidate Starts for BrutonGaster_45:

(Start: 47 @32466 has 14 MA's), (113, 32613), (172, 32724), (196, 32781), (201, 32784), (233, 32865), (234, 32868), (266, 32964), (281, 33006), (334, 33144), (365, 33237), (369, 33249), (386, 33336), (397, 33372), (424, 33429), (428, 33441), (431, 33450), (436, 33477), (437, 33480), (438, 33483), (464, 33564), (475, 33600), (523, 33834), (526, 33849), (539, 33903), (547, 33933), (565, 33978), (577, 34014), (580, 34023),

Gene: Budski_29 Start: 22226, Stop: 24061, Start Num: 34

Candidate Starts for Budski_29:

(Start: 34 @22226 has 21 MA's), (90, 22388), (103, 22418), (129, 22472), (138, 22487), (143, 22499), (145, 22502), (152, 22517), (154, 22520), (155, 22523), (192, 22613), (196, 22622), (197, 22625), (226, 22712), (232, 22733), (234, 22739), (243, 22760), (244, 22769), (250, 22790), (252, 22796), (306, 22898), (307, 22901), (325, 22931), (330, 22943), (345, 22967), (369, 23042), (374, 23054), (381, 23096), (387, 23129), (397, 23162), (400, 23168), (408, 23192), (415, 23204), (432, 23261), (436, 23279), (477, 23411), (485, 23435), (488, 23453), (515, 23606), (520, 23621), (521, 23633), (522, 23636), (524, 23642), (539, 23687), (543, 23705), (547, 23717), (549, 23723), (557, 23735), (561, 23744), (580, 23798), (598, 23867), (606, 23900), (609, 23906), (625, 23969), (626, 23972), (629, 23990), (635, 24011), (636, 24020),

Gene: Bunnybear_25 Start: 23020, Stop: 24708, Start Num: 97

Candidate Starts for Bunnybear_25:

(5, 22567), (20, 22780), (35, 22852), (37, 22855), (Start: 97 @23020 has 1 MA's), (131, 23089), (139, 23101), (203, 23254), (205, 23257), (214, 23281), (219, 23293), (226, 23317), (231, 23335), (232, 23338), (272, 23455), (277, 23467), (322, 23569), (336, 23593), (360, 23665), (369, 23695), (371, 23698), (374, 23707), (381, 23755), (408, 23845), (415, 23857), (427, 23893), (432, 23914), (436, 23932), (455, 23980), (477, 24064), (515, 24256), (517, 24262), (520, 24271), (547, 24382), (561, 24409), (576, 24457), (579, 24460), (589, 24487), (598, 24532),

Gene: Camerico_31 Start: 38003, Stop: 39535, Start Num: 179

Candidate Starts for Camerico_31:

(Start: 179 @38003 has 1 MA's), (236, 38162), (244, 38186), (278, 38288), (306, 38372), (353, 38495), (359, 38510), (360, 38513), (377, 38579), (405, 38681), (408, 38690), (411, 38696), (438, 38777), (483, 38921), (501, 38999), (520, 39122), (552, 39212), (585, 39299), (623, 39440), (624, 39455),

Gene: ChadMasterC_37 Start: 33999, Stop: 35720, Start Num: 92

Candidate Starts for ChadMasterC_37:

(Start: 92 @33999 has 22 MA's), (157, 34134), (162, 34143), (170, 34176), (177, 34200), (203, 34269), (229, 34344), (291, 34530), (310, 34569), (312, 34578), (317, 34593), (341, 34650), (349, 34674), (371, 34746), (391, 34833), (403, 34869), (405, 34875), (421, 34917), (427, 34932), (430, 34941),

(473, 35088), (497, 35172), (503, 35205), (509, 35253), (522, 35319), (524, 35325), (526, 35337), (537, 35367), (540, 35373), (553, 35409), (557, 35418), (572, 35463),

Gene: Charming_38 Start: 33240, Stop: 35162, Start Num: 29

Candidate Starts for Charming_38:

(Start: 29 @33240 has 37 MA's), (69, 33375), (90, 33417), (101, 33441), (135, 33510), (Start: 149 @33540 has 1 MA's), (167, 33585), (232, 33777), (234, 33783), (243, 33804), (247, 33822), (250, 33834), (272, 33894), (292, 33948), (345, 34062), (369, 34149), (381, 34203), (397, 34269), (408, 34299), (415, 34311), (430, 34356), (432, 34368), (436, 34386), (447, 34413), (468, 34491), (477, 34518), (485, 34542), (508, 34665), (514, 34707), (539, 34791), (547, 34821), (561, 34848), (580, 34902), (592, 34932), (606, 35004), (611, 35013),

Gene: CherryCola_37 Start: 29154, Stop: 31076, Start Num: 29

Candidate Starts for CherryCola_37:

(Start: 29 @29154 has 37 MA's), (63, 29277), (72, 29298), (95, 29346), (Start: 149 @29454 has 1 MA's), (160, 29475), (192, 29556), (203, 29592), (205, 29595), (231, 29673), (232, 29676), (234, 29682), (243, 29703), (250, 29733), (252, 29739), (304, 29874), (339, 29961), (344, 29970), (346, 29976), (348, 29982), (369, 30057), (377, 30090), (381, 30111), (400, 30183), (408, 30207), (415, 30219), (432, 30276), (477, 30426), (485, 30450), (515, 30618), (520, 30633), (547, 30729), (589, 30840), (597, 30876),

Gene: Clap_25 Start: 20505, Stop: 22028, Start Num: 199

Candidate Starts for Clap_25:

(Start: 199 @20505 has 19 MA's), (227, 20577), (230, 20589), (238, 20616), (242, 20622), (246, 20640), (286, 20760), (288, 20769), (313, 20835), (357, 20949), (371, 20991), (377, 21021), (383, 21051), (398, 21111), (404, 21117), (415, 21141), (422, 21165), (430, 21183), (432, 21195), (436, 21213), (441, 21228), (444, 21234), (460, 21285), (467, 21312), (485, 21363), (512, 21531), (545, 21669), (554, 21690), (555, 21693), (559, 21705), (572, 21744), (612, 21891), (625, 21951), (626, 21954),

Gene: Claus_20 Start: 19209, Stop: 21005, Start Num: 53

Candidate Starts for Claus_20:

(Start: 53 @19209 has 23 MA's), (105, 19329), (111, 19350), (121, 19362), (136, 19386), (147, 19413), (172, 19482), (176, 19491), (189, 19524), (195, 19536), (203, 19566), (214, 19593), (248, 19710), (265, 19758), (278, 19794), (290, 19839), (311, 19890), (354, 19995), (362, 20013), (372, 20046), (373, 20049), (378, 20088), (386, 20127), (407, 20187), (409, 20190), (436, 20274), (486, 20421), (502, 20499), (520, 20592), (523, 20607), (538, 20667), (544, 20676), (573, 20751), (578, 20766), (600, 20850), (601, 20853), (610, 20877), (618, 20901), (623, 20916), (637, 20988),

Gene: ClubL_56 Start: 35318, Stop: 37150, Start Num: 47

Candidate Starts for ClubL_56:

(Start: 47 @35318 has 14 MA's), (94, 35423), (99, 35432), (131, 35486), (172, 35576), (188, 35615), (196, 35633), (233, 35717), (255, 35786), (353, 36056), (394, 36218), (428, 36302), (430, 36308), (465, 36428), (523, 36704), (534, 36761), (536, 36767), (577, 36884), (588, 36911), (607, 36995), (627, 37064),

Gene: Crater_27 Start: 21679, Stop: 23514, Start Num: 34

Candidate Starts for Crater_27:

(Start: 34 @21679 has 21 MA's), (90, 21841), (103, 21871), (129, 21925), (138, 21940), (143, 21952), (145, 21955), (152, 21970), (154, 21973), (155, 21976), (192, 22066), (196, 22075), (197, 22078), (226, 22165), (232, 22186), (234, 22192), (243, 22213), (244, 22222), (250, 22243), (252, 22249), (306, 22351), (307, 22354), (325, 22384), (330, 22396), (345, 22420), (369, 22495), (374, 22507), (381, 22549), (387, 22582), (397, 22615), (400, 22621), (408, 22645), (415, 22657), (432, 22714),

(436, 22732), (477, 22864), (485, 22888), (488, 22906), (515, 23059), (520, 23074), (522, 23089), (524, 23095), (539, 23140), (543, 23158), (547, 23170), (549, 23176), (557, 23188), (561, 23197), (580, 23251), (589, 23275), (598, 23320), (606, 23353), (609, 23359), (625, 23422), (626, 23425), (629, 23443), (635, 23464), (636, 23473),

Gene: Crossroads_20 Start: 19228, Stop: 21024, Start Num: 53

Candidate Starts for Crossroads_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386, 20146), (406, 20203), (407, 20206), (409, 20209), (436, 20293), (440, 20302), (452, 20329), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (544, 20695), (556, 20722), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: Cucurbita_58 Start: 36688, Stop: 38520, Start Num: 47

Candidate Starts for Cucurbita_58:

(Start: 47 @36688 has 14 MA's), (94, 36793), (99, 36802), (131, 36856), (172, 36946), (188, 36985), (196, 37003), (233, 37087), (255, 37156), (353, 37426), (394, 37588), (428, 37672), (430, 37678), (465, 37798), (523, 38074), (534, 38131), (536, 38137), (577, 38254), (588, 38281), (607, 38365), (627, 38434),

Gene: Culver_61 Start: 38678, Stop: 40513, Start Num: 47

Candidate Starts for Culver_61:

(Start: 47 @38678 has 14 MA's), (131, 38846), (133, 38849), (172, 38936), (187, 38972), (196, 38993), (233, 39077), (249, 39134), (255, 39146), (296, 39269), (353, 39416), (394, 39578), (397, 39587), (424, 39650), (428, 39662), (430, 39668), (436, 39698), (523, 40064), (534, 40121), (536, 40127), (584, 40262), (630, 40442), (642, 40493),

Gene: Cynthia_25 Start: 20505, Stop: 22028, Start Num: 199

Candidate Starts for Cynthia_25:

(Start: 199 @20505 has 19 MA's), (227, 20577), (230, 20589), (238, 20616), (242, 20622), (246, 20640), (286, 20760), (288, 20769), (313, 20835), (357, 20949), (371, 20991), (377, 21021), (383, 21051), (398, 21111), (404, 21117), (415, 21141), (422, 21165), (430, 21183), (432, 21195), (436, 21213), (441, 21228), (444, 21234), (460, 21285), (467, 21312), (485, 21363), (512, 21531), (545, 21669), (554, 21690), (555, 21693), (559, 21705), (572, 21744), (612, 21891), (625, 21951), (626, 21954),

Gene: DHan_20 Start: 19145, Stop: 20941, Start Num: 53

Candidate Starts for DHan_20:

(Start: 53 @19145 has 23 MA's), (105, 19265), (136, 19322), (147, 19349), (170, 19406), (172, 19418), (176, 19427), (195, 19472), (203, 19502), (214, 19529), (248, 19646), (265, 19694), (278, 19730), (290, 19775), (311, 19826), (354, 19931), (362, 19949), (372, 19982), (373, 19985), (378, 20024), (386, 20063), (407, 20123), (409, 20126), (436, 20210), (486, 20357), (502, 20435), (520, 20528), (523, 20543), (538, 20603), (544, 20612), (556, 20639), (573, 20687), (578, 20702), (600, 20786), (610, 20813), (618, 20837), (623, 20852), (637, 20924),

Gene: DanBing_19 Start: 19049, Stop: 20845, Start Num: 53

Candidate Starts for DanBing_19:

(Start: 53 @19049 has 23 MA's), (105, 19169), (111, 19190), (121, 19202), (136, 19226), (147, 19253), (172, 19322), (176, 19331), (189, 19364), (195, 19376), (203, 19406), (214, 19433), (248, 19550), (265, 19598), (278, 19634), (290, 19679), (311, 19730), (354, 19835), (362, 19853), (372, 19886), (373, 19889), (378, 19928), (386, 19967), (407, 20027), (409, 20030), (436, 20114), (486, 20261), (502, 20339), (520, 20432), (523, 20447), (538, 20507), (544, 20516), (556, 20543), (573, 20591),

(578, 20606), (600, 20690), (601, 20693), (610, 20717), (618, 20741), (623, 20756), (637, 20828),

Gene: Danforth_27 Start: 21490, Stop: 23211, Start Num: 68

Candidate Starts for Danforth_27:

(Start: 68 @21490 has 11 MA's), (147, 21634), (196, 21748), (226, 21838), (235, 21874), (243, 21895), (267, 21967), (274, 21991), (290, 22045), (337, 22147), (373, 22243), (382, 22297), (393, 22345), (440, 22474), (449, 22492), (487, 22618), (528, 22822), (529, 22831), (558, 22912), (619, 23107),

Gene: DekHockey33_33 Start: 21865, Stop: 23577, Start Num: 45

Candidate Starts for DekHockey33_33:

(Start: 45 @21865 has 20 MA's), (82, 21958), (155, 22108), (169, 22147), (Start: 179 @22177 has 1 MA's), (233, 22303), (234, 22306), (281, 22444), (298, 22501), (342, 22546), (359, 22552), (376, 22618), (386, 22672), (428, 22786), (432, 22804), (436, 22822), (461, 22879), (505, 23056), (536, 23215), (547, 23251), (590, 23368), (600, 23419), (621, 23479), (627, 23515), (638, 23563),

Gene: Denise_23 Start: 19509, Stop: 21110, Start Num: 141

Candidate Starts for Denise_23:

(67, 19368), (70, 19371), (124, 19479), (Start: 141 @19509 has 1 MA's), (160, 19542), (172, 19581), (192, 19620), (232, 19728), (234, 19734), (253, 19791), (266, 19824), (272, 19845), (277, 19857), (290, 19893), (336, 19983), (345, 19998), (360, 20055), (369, 20085), (374, 20097), (381, 20145), (408, 20235), (415, 20247), (427, 20283), (432, 20304), (455, 20370), (477, 20454), (515, 20646), (517, 20652), (547, 20772), (561, 20799), (589, 20877), (598, 20922),

Gene: Derg_34 Start: 31792, Stop: 33513, Start Num: 92

Candidate Starts for Derg_34:

(Start: 92 @31792 has 22 MA's), (151, 31915), (157, 31927), (177, 31993), (203, 32062), (219, 32098), (291, 32323), (310, 32362), (333, 32422), (349, 32467), (367, 32527), (403, 32662), (405, 32668), (421, 32710), (427, 32725), (435, 32761), (446, 32782), (473, 32881), (497, 32965), (503, 32998), (508, 33043), (509, 33046), (515, 33082), (524, 33118), (526, 33130), (540, 33166), (553, 33202), (572, 33256),

Gene: Dixon_28 Start: 21509, Stop: 23230, Start Num: 68

Candidate Starts for Dixon_28:

(Start: 68 @21509 has 11 MA's), (147, 21653), (155, 21668), (196, 21767), (235, 21893), (243, 21914), (267, 21986), (274, 22010), (290, 22064), (337, 22166), (373, 22262), (382, 22316), (393, 22364), (434, 22475), (449, 22511), (482, 22622), (487, 22637), (528, 22841), (529, 22850), (558, 22931), (593, 23027), (619, 23126),

Gene: Djokovic_25 Start: 21340, Stop: 23304, Start Num: 26

Candidate Starts for Djokovic_25:

(Start: 26 @21340 has 7 MA's), (Start: 47 @21421 has 14 MA's), (50, 21430), (64, 21469), (66, 21472), (135, 21604), (156, 21646), (163, 21664), (Start: 190 @21742 has 1 MA's), (212, 21805), (245, 21919), (258, 21955), (271, 21994), (289, 22048), (307, 22099), (348, 22198), (369, 22273), (374, 22285), (386, 22360), (430, 22477), (431, 22480), (433, 22492), (519, 22849), (523, 22867), (534, 22924), (536, 22930), (547, 22966), (549, 22972), (607, 23158), (627, 23227),

Gene: DonkeyMan_25 Start: 19656, Stop: 21356, Start Num: 84

Candidate Starts for DonkeyMan_25:

(84, 19656), (142, 19755), (186, 19851), (192, 19866), (232, 19986), (234, 19992), (272, 20103), (275, 20109), (341, 20262), (369, 20355), (371, 20358), (374, 20367), (377, 20388), (381, 20409), (397, 20478), (398, 20481), (408, 20499), (415, 20511), (427, 20547), (432, 20568), (436, 20586), (455, 20634), (471, 20703), (477, 20718), (515, 20910), (517, 20916), (520, 20925), (547, 21036), (561, 21063), (576, 21111), (589, 21141), (598, 21186),

Gene: DrSeegs_20 Start: 19228, Stop: 21024, Start Num: 53

Candidate Starts for DrSeegs_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386, 20146), (406, 20203), (409, 20209), (436, 20293), (440, 20302), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (544, 20695), (556, 20722), (562, 20740), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: Dusty_54 Start: 35127, Stop: 36959, Start Num: 47

Candidate Starts for Dusty_54:

(Start: 47 @35127 has 14 MA's), (94, 35232), (99, 35241), (131, 35295), (172, 35385), (187, 35421), (196, 35442), (201, 35445), (233, 35526), (255, 35595), (353, 35865), (394, 36027), (428, 36111), (430, 36117), (465, 36237), (523, 36513), (534, 36570), (536, 36576), (588, 36720), (607, 36804), (627, 36873),

Gene: EMSquaredA_28 Start: 22623, Stop: 24575, Start Num: 19

Candidate Starts for EMSquaredA_28:

(1, 22335), (2, 22392), (4, 22407), (6, 22443), (7, 22488), (8, 22491), (Start: 19 @22623 has 8 MA's), (Start: 22 @22638 has 1 MA's), (27, 22677), (28, 22680), (114, 22908), (132, 22935), (Start: 141 @22950 has 1 MA's), (232, 23184), (234, 23190), (238, 23202), (266, 23280), (272, 23301), (320, 23421), (341, 23463), (369, 23556), (374, 23568), (381, 23610), (408, 23700), (415, 23712), (432, 23769), (441, 23802), (455, 23835), (469, 23895), (477, 23919), (484, 23937), (515, 24111), (517, 24117), (528, 24165), (598, 24387), (623, 24468), (625, 24489),

Gene: Ebert_25 Start: 20505, Stop: 22028, Start Num: 199

Candidate Starts for Ebert_25:

(Start: 199 @20505 has 19 MA's), (227, 20577), (230, 20589), (238, 20616), (242, 20622), (246, 20640), (286, 20760), (288, 20769), (313, 20835), (357, 20949), (371, 20991), (377, 21021), (383, 21051), (398, 21111), (404, 21117), (415, 21141), (422, 21165), (430, 21183), (432, 21195), (436, 21213), (441, 21228), (444, 21234), (460, 21285), (467, 21312), (485, 21363), (512, 21531), (545, 21669), (554, 21690), (555, 21693), (559, 21705), (572, 21744), (612, 21891), (625, 21951), (626, 21954),

Gene: Ecliptus_32 Start: 23700, Stop: 25484, Start Num: 34

Candidate Starts for Ecliptus_32:

(Start: 34 @23700 has 21 MA's), (38, 23715), (48, 23742), (59, 23772), (91, 23844), (96, 23856), (Start: 130 @23919 has 5 MA's), (138, 23931), (161, 23973), (178, 24012), (185, 24021), (214, 24099), (232, 24156), (234, 24162), (243, 24183), (244, 24192), (250, 24213), (252, 24219), (306, 24321), (307, 24324), (325, 24354), (330, 24366), (345, 24390), (369, 24465), (374, 24477), (381, 24519), (387, 24552), (397, 24585), (400, 24591), (408, 24615), (415, 24627), (432, 24684), (436, 24702), (477, 24834), (485, 24858), (488, 24876), (515, 25029), (520, 25044), (522, 25059), (524, 25065), (539, 25110), (543, 25128), (547, 25140), (549, 25146), (557, 25158), (561, 25167), (580, 25221), (598, 25290), (606, 25323), (609, 25329), (625, 25392), (626, 25395), (629, 25413), (635, 25434), (636, 25443),

Gene: EdnaMode_24 Start: 19408, Stop: 20961, Start Num: 153

Candidate Starts for EdnaMode_24:

(Start: 153 @19408 has 3 MA's), (177, 19477), (187, 19492), (201, 19534), (203, 19540), (232, 19624), (234, 19630), (243, 19651), (247, 19669), (251, 19681), (253, 19687), (327, 19843), (351, 19885), (377, 19978), (381, 19999), (397, 20065), (408, 20095), (415, 20107), (432, 20164), (477, 20314), (485, 20338), (515, 20506), (539, 20605), (543, 20623), (547, 20635), (611, 20812), (619, 20839),

(627, 20878),

Gene: EnalisNailo_28 Start: 22772, Stop: 24724, Start Num: 19

Candidate Starts for EnalisNailo_28:

(1, 22484), (2, 22541), (4, 22556), (6, 22592), (7, 22637), (8, 22640), (Start: 19 @22772 has 8 MA's), (Start: 22 @22787 has 1 MA's), (27, 22826), (28, 22829), (114, 23057), (132, 23084), (Start: 141 @23099 has 1 MA's), (232, 23333), (234, 23339), (238, 23351), (266, 23429), (272, 23450), (320, 23570), (341, 23612), (369, 23705), (374, 23717), (381, 23759), (408, 23849), (415, 23861), (432, 23918), (441, 23951), (455, 23984), (469, 24044), (477, 24068), (484, 24086), (515, 24260), (517, 24266), (528, 24314), (598, 24536), (623, 24617), (625, 24638),

Gene: Engineer_58 Start: 35802, Stop: 37634, Start Num: 47

Candidate Starts for Engineer_58:

(Start: 47 @35802 has 14 MA's), (94, 35907), (99, 35916), (131, 35970), (172, 36060), (188, 36099), (196, 36117), (233, 36201), (255, 36270), (353, 36540), (394, 36702), (428, 36786), (430, 36792), (465, 36912), (523, 37188), (534, 37245), (536, 37251), (577, 37368), (588, 37395), (607, 37479), (627, 37548),

Gene: Epsocamisio_33 Start: 21743, Stop: 23455, Start Num: 45

Candidate Starts for Epsocamisio_33:

(Start: 45 @21743 has 20 MA's), (82, 21836), (140, 21953), (155, 21986), (169, 22025), (Start: 179 @22055 has 1 MA's), (233, 22181), (234, 22184), (281, 22322), (298, 22379), (342, 22424), (359, 22430), (376, 22496), (386, 22550), (428, 22664), (432, 22682), (436, 22700), (461, 22757), (505, 22934), (536, 23093), (547, 23129), (590, 23246), (600, 23297), (621, 23357), (627, 23393), (638, 23441),

Gene: Eudoria_28 Start: 22923, Stop: 24428, Start Num: 194

Candidate Starts for Eudoria_28:

(Start: 194 @22923 has 29 MA's), (218, 22992), (222, 23004), (254, 23115), (259, 23127), (261, 23133), (289, 23220), (302, 23256), (303, 23262), (307, 23271), (397, 23565), (421, 23619), (422, 23622), (430, 23643), (443, 23688), (473, 23793), (497, 23877), (508, 23958), (509, 23961), (535, 24084), (571, 24180), (589, 24228), (602, 24288), (617, 24321), (620, 24327), (634, 24399),

Gene: Evamon_33 Start: 28220, Stop: 30142, Start Num: 29

Candidate Starts for Evamon_33:

(Start: 29 @28220 has 37 MA's), (63, 28343), (72, 28364), (95, 28412), (Start: 149 @28520 has 1 MA's), (160, 28541), (192, 28622), (203, 28658), (205, 28661), (231, 28739), (232, 28742), (234, 28748), (243, 28769), (250, 28799), (252, 28805), (304, 28940), (339, 29027), (344, 29036), (346, 29042), (348, 29048), (377, 29156), (381, 29177), (400, 29249), (408, 29273), (415, 29285), (432, 29342), (477, 29492), (485, 29516), (515, 29684), (520, 29699), (547, 29795), (589, 29906), (597, 29942),

Gene: Eviarto_26 Start: 22926, Stop: 24431, Start Num: 194

Candidate Starts for Eviarto_26:

(60, 22611), (108, 22719), (144, 22788), (Start: 146 @22791 has 5 MA's), (158, 22815), (161, 22821), (Start: 194 @22926 has 29 MA's), (218, 22995), (222, 23007), (254, 23118), (257, 23124), (259, 23130), (261, 23136), (289, 23223), (302, 23259), (303, 23265), (307, 23274), (397, 23568), (421, 23622), (422, 23625), (430, 23646), (443, 23691), (473, 23796), (497, 23880), (508, 23961), (509, 23964), (571, 24183), (589, 24231), (602, 24291), (617, 24324), (620, 24330), (634, 24402),

Gene: Expelliarmus_27 Start: 21476, Stop: 23197, Start Num: 68

Candidate Starts for Expelliarmus_27:

(Start: 68 @21476 has 11 MA's), (147, 21620), (155, 21635), (196, 21734), (226, 21824), (235, 21860), (267, 21953), (274, 21977), (290, 22031), (337, 22133), (373, 22229), (382, 22283), (393, 22331), (440, 22460), (449, 22478), (487, 22604), (528, 22808), (529, 22817), (558, 22898), (593, 22994), (619, 23093), (638, 23180),

Gene: Faith1_20 Start: 19225, Stop: 21024, Start Num: 52

Candidate Starts for Faith1_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386, 20146), (406, 20203), (409, 20209), (436, 20293), (440, 20302), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (544, 20695), (556, 20722), (562, 20740), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: Faith5x5_24 Start: 19344, Stop: 20945, Start Num: 146

Candidate Starts for Faith5x5_24:

(58, 19161), (74, 19206), (76, 19209), (144, 19341), (Start: 146 @19344 has 5 MA's), (177, 19416), (187, 19431), (189, 19437), (201, 19473), (203, 19479), (214, 19506), (220, 19521), (231, 19560), (232, 19563), (234, 19569), (243, 19590), (247, 19608), (253, 19626), (266, 19659), (271, 19677), (272, 19680), (277, 19692), (350, 19878), (369, 19944), (371, 19947), (377, 19977), (393, 20055), (404, 20076), (408, 20088), (415, 20100), (432, 20157), (444, 20196), (477, 20307), (501, 20403), (515, 20499), (533, 20568), (547, 20610), (561, 20637), (580, 20691), (589, 20715), (597, 20751), (619, 20823), (626, 20859),

Gene: Finemlucis_20 Start: 19236, Stop: 21032, Start Num: 53

Candidate Starts for Finemlucis_20:

(Start: 52 @19233 has 5 MA's), (Start: 53 @19236 has 23 MA's), (121, 19389), (136, 19413), (172, 19509), (176, 19518), (195, 19563), (203, 19593), (214, 19620), (241, 19713), (248, 19737), (278, 19821), (290, 19866), (354, 20022), (362, 20040), (366, 20055), (372, 20073), (373, 20076), (386, 20154), (406, 20211), (407, 20214), (409, 20217), (436, 20301), (440, 20310), (452, 20337), (486, 20448), (487, 20451), (520, 20619), (538, 20694), (544, 20703), (556, 20730), (567, 20763), (573, 20778), (578, 20793), (581, 20799), (600, 20877), (601, 20880), (618, 20928), (637, 21015),

Gene: Finkle_23 Start: 19627, Stop: 21318, Start Num: 137

Candidate Starts for Finkle_23:

(Start: 137 @19627 has 1 MA's), (173, 19726), (182, 19744), (184, 19750), (237, 19909), (244, 19930), (257, 19963), (269, 19996), (282, 20038), (284, 20044), (293, 20080), (299, 20092), (314, 20131), (405, 20422), (408, 20431), (418, 20455), (425, 20473), (426, 20476), (436, 20512), (441, 20527), (444, 20533), (469, 20632), (490, 20707), (500, 20752), (507, 20818), (510, 20842), (515, 20866), (517, 20872), (527, 20917), (597, 21133),

Gene: Fireball_34 Start: 28343, Stop: 30265, Start Num: 29

Candidate Starts for Fireball_34:

(Start: 29 @28343 has 37 MA's), (63, 28466), (72, 28487), (95, 28535), (Start: 149 @28643 has 1 MA's), (160, 28664), (192, 28745), (203, 28781), (205, 28784), (231, 28862), (232, 28865), (234, 28871), (243, 28892), (250, 28922), (252, 28928), (304, 29063), (339, 29150), (344, 29159), (346, 29165), (348, 29171), (369, 29246), (377, 29279), (381, 29300), (400, 29372), (408, 29396), (415, 29408), (432, 29465), (477, 29615), (485, 29639), (515, 29807), (520, 29822), (547, 29918), (589, 30029), (597, 30065),

Gene: Fitzgerald_35 Start: 33217, Stop: 34938, Start Num: 92

Candidate Starts for Fitzgerald_35:

(Start: 92 @33217 has 22 MA's), (157, 33352), (162, 33361), (170, 33394), (177, 33418), (203, 33487), (291, 33748), (310, 33787), (312, 33796), (317, 33811), (341, 33868), (349, 33892), (371, 33964), (391, 34051), (403, 34087), (405, 34093), (421, 34135), (427, 34150), (430, 34159), (473, 34306), (497, 34390), (503, 34423), (509, 34471), (522, 34537), (524, 34543), (526, 34555), (537, 34585), (540, 34591), (553, 34627), (557, 34636), (572, 34681),

Gene: Flatwoods_37 Start: 32153, Stop: 33874, Start Num: 92

Candidate Starts for Flatwoods_37:

(Start: 92 @32153 has 22 MA's), (151, 32276), (157, 32288), (177, 32354), (203, 32423), (219, 32459), (229, 32498), (291, 32684), (310, 32723), (333, 32783), (349, 32828), (367, 32888), (403, 33023), (405, 33029), (421, 33071), (427, 33086), (435, 33122), (446, 33143), (473, 33242), (497, 33326), (503, 33359), (508, 33404), (509, 33407), (515, 33443), (524, 33479), (526, 33491), (540, 33527), (553, 33563), (572, 33617),

Gene: Floral_28 Start: 22623, Stop: 24575, Start Num: 19

Candidate Starts for Floral_28:

(1, 22335), (2, 22392), (4, 22407), (6, 22443), (7, 22488), (8, 22491), (Start: 19 @22623 has 8 MA's), (Start: 22 @22638 has 1 MA's), (27, 22677), (28, 22680), (114, 22908), (132, 22935), (Start: 141 @22950 has 1 MA's), (232, 23184), (234, 23190), (238, 23202), (266, 23280), (272, 23301), (320, 23421), (341, 23463), (369, 23556), (374, 23568), (381, 23610), (408, 23700), (415, 23712), (432, 23769), (441, 23802), (455, 23835), (469, 23895), (477, 23919), (484, 23937), (515, 24111), (517, 24117), (528, 24165), (598, 24387), (623, 24468), (625, 24489),

Gene: Forza_104 Start: 62421, Stop: 64100, Start Num: 77

Candidate Starts for Forza_104:

(Start: 68 @62403 has 11 MA's), (Start: 77 @62421 has 6 MA's), (Start: 100 @62463 has 1 MA's), (104, 62472), (142, 62538), (143, 62541), (160, 62562), (201, 62673), (218, 62715), (264, 62853), (272, 62877), (371, 63123), (397, 63240), (411, 63267), (415, 63273), (432, 63327), (444, 63366), (477, 63477), (483, 63492), (485, 63501), (518, 63672), (522, 63693), (549, 63786), (594, 63894), (636, 64071),

Gene: Fosterous_36 Start: 33665, Stop: 35518, Start Num: 29

Candidate Starts for Fosterous_36:

(Start: 29 @33665 has 37 MA's), (69, 33800), (Start: 73 @33809 has 1 MA's), (90, 33842), (101, 33866), (135, 33935), (167, 34010), (232, 34202), (234, 34208), (243, 34229), (247, 34247), (250, 34259), (272, 34319), (331, 34400), (369, 34505), (371, 34508), (377, 34538), (393, 34613), (397, 34625), (408, 34655), (415, 34667), (430, 34712), (432, 34724), (436, 34742), (447, 34769), (468, 34847), (477, 34874), (485, 34898), (508, 35021), (514, 35063), (539, 35147), (547, 35177), (561, 35204), (580, 35258), (592, 35288), (606, 35360), (611, 35369),

Gene: Frickyeah_28 Start: 21884, Stop: 23719, Start Num: 34

Candidate Starts for Frickyeah_28:

(Start: 34 @21884 has 21 MA's), (90, 22046), (103, 22076), (129, 22130), (138, 22145), (143, 22157), (145, 22160), (152, 22175), (154, 22178), (155, 22181), (192, 22271), (196, 22280), (197, 22283), (226, 22370), (232, 22391), (234, 22397), (243, 22418), (244, 22427), (250, 22448), (252, 22454), (306, 22556), (307, 22559), (325, 22589), (330, 22601), (345, 22625), (347, 22634), (369, 22700), (374, 22712), (381, 22754), (387, 22787), (397, 22820), (400, 22826), (408, 22850), (415, 22862), (432, 22919), (436, 22937), (477, 23069), (485, 23093), (488, 23111), (515, 23264), (520, 23279), (522, 23294), (524, 23300), (539, 23345), (543, 23363), (547, 23375), (549, 23381), (557, 23393), (561, 23402), (580, 23456), (598, 23525), (606, 23558), (609, 23564), (625, 23627), (626, 23630), (629, 23648), (635, 23669), (636, 23678),

Gene: FroggyToad_25 Start: 20570, Stop: 22192, Start Num: 146

Candidate Starts for FroggyToad_25:

(Start: 146 @20570 has 5 MA's), (187, 20657), (201, 20699), (203, 20705), (214, 20732), (232, 20789), (243, 20816), (246, 20831), (266, 20885), (277, 20918), (341, 21077), (350, 21104), (371, 21173), (377, 21203), (404, 21302), (408, 21314), (415, 21326), (432, 21383), (441, 21416), (444, 21422), (466, 21497), (477, 21533), (508, 21683), (515, 21728), (625, 22097),

Gene: FuegoCuervo_39 Start: 31604, Stop: 33325, Start Num: 92

Candidate Starts for FuegoCuervo_39:

(Start: 92 @31604 has 22 MA's), (157, 31739), (162, 31748), (170, 31781), (177, 31805), (203, 31874), (216, 31904), (291, 32135), (310, 32174), (312, 32183), (317, 32198), (341, 32255), (349, 32279), (371, 32351), (391, 32438), (403, 32474), (405, 32480), (420, 32516), (421, 32522), (427, 32537), (472, 32690), (473, 32693), (497, 32777), (503, 32810), (509, 32858), (522, 32924), (524, 32930), (526, 32942), (537, 32972), (540, 32978), (553, 33014), (557, 33023), (572, 33068), (611, 33197),

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

Candidate Starts for GAL1_28:

(21, 22722), (27, 22764), (Start: 55 @22866 has 2 MA's), (62, 22887), (71, 22908), (88, 22941), (114, 22995), (126, 23013), (131, 23022), (134, 23025), (139, 23034), (155, 23061), (162, 23073), (186, 23136), (200, 23169), (205, 23190), (214, 23214), (219, 23226), (226, 23250), (266, 23367), (272, 23388), (277, 23400), (336, 23526), (350, 23562), (369, 23628), (371, 23631), (374, 23640), (381, 23682), (408, 23772), (415, 23784), (427, 23820), (432, 23841), (455, 23907), (477, 23991), (515, 24183), (517, 24189), (520, 24198), (598, 24459),

Gene: Gabriela_20 Start: 19228, Stop: 21024, Start Num: 53

Candidate Starts for Gabriela_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386, 20146), (406, 20203), (409, 20209), (436, 20293), (440, 20302), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (544, 20695), (556, 20722), (562, 20740), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: Gaea_36 Start: 31801, Stop: 33522, Start Num: 92

Candidate Starts for Gaea_36:

(Start: 92 @31801 has 22 MA's), (151, 31924), (157, 31936), (177, 32002), (203, 32071), (219, 32107), (291, 32332), (310, 32371), (333, 32431), (349, 32476), (367, 32536), (403, 32671), (405, 32677), (421, 32719), (427, 32734), (435, 32770), (446, 32791), (473, 32890), (497, 32974), (503, 33007), (509, 33055), (515, 33091), (524, 33127), (526, 33139), (531, 33154), (540, 33175), (572, 33265),

Gene: Galadriel_38 Start: 34154, Stop: 36079, Start Num: 29

Candidate Starts for Galadriel_38:

(Start: 29 @34154 has 37 MA's), (69, 34289), (Start: 73 @34298 has 1 MA's), (90, 34331), (101, 34355), (135, 34424), (167, 34499), (232, 34691), (234, 34697), (243, 34718), (247, 34736), (250, 34748), (272, 34808), (292, 34862), (345, 34979), (369, 35066), (381, 35120), (393, 35174), (397, 35186), (408, 35216), (415, 35228), (430, 35273), (432, 35285), (436, 35303), (447, 35330), (468, 35408), (477, 35435), (485, 35459), (508, 35582), (514, 35624), (539, 35708), (547, 35738), (561, 35765), (580, 35819), (592, 35849), (606, 35921), (611, 35930),

Gene: Gardann_20 Start: 19233, Stop: 21029, Start Num: 53

Candidate Starts for Gardann_20:

(Start: 52 @19230 has 5 MA's), (Start: 53 @19233 has 23 MA's), (121, 19386), (136, 19410), (172, 19506), (176, 19515), (193, 19557), (195, 19560), (203, 19590), (214, 19617), (241, 19710), (248, 19734), (278, 19818), (290, 19863), (305, 19899), (354, 20019), (362, 20037), (366, 20052), (372,

20070), (373, 20073), (386, 20151), (406, 20208), (407, 20211), (409, 20214), (436, 20298), (440, 20307), (452, 20334), (486, 20445), (487, 20448), (520, 20616), (538, 20691), (544, 20700), (556, 20727), (567, 20760), (573, 20775), (578, 20790), (581, 20796), (600, 20874), (601, 20877), (618, 20925), (637, 21012),

Gene: Geeche_55 Start: 35218, Stop: 37050, Start Num: 47

Candidate Starts for Geeche_55:

(Start: 47 @35218 has 14 MA's), (94, 35323), (99, 35332), (131, 35386), (172, 35476), (188, 35515), (196, 35533), (233, 35617), (255, 35686), (353, 35956), (394, 36118), (428, 36202), (430, 36208), (465, 36328), (523, 36604), (534, 36661), (536, 36667), (577, 36784), (588, 36811), (607, 36895), (627, 36964),

Gene: GemG_25 Start: 20505, Stop: 22028, Start Num: 199

Candidate Starts for GemG_25:

(Start: 199 @20505 has 19 MA's), (227, 20577), (230, 20589), (238, 20616), (242, 20622), (246, 20640), (286, 20760), (288, 20769), (313, 20835), (357, 20949), (371, 20991), (377, 21021), (383, 21051), (398, 21111), (404, 21117), (415, 21141), (422, 21165), (430, 21183), (432, 21195), (436, 21213), (441, 21228), (444, 21234), (460, 21285), (467, 21312), (485, 21363), (512, 21531), (545, 21669), (554, 21690), (555, 21693), (559, 21705), (572, 21744), (612, 21891), (625, 21951), (626, 21954),

Gene: Geodirt_35 Start: 33142, Stop: 34863, Start Num: 92

Candidate Starts for Geodirt_35:

(Start: 92 @33142 has 22 MA's), (157, 33277), (162, 33286), (170, 33319), (177, 33343), (203, 33412), (229, 33487), (291, 33673), (310, 33712), (312, 33721), (341, 33793), (349, 33817), (371, 33889), (391, 33976), (403, 34012), (405, 34018), (421, 34060), (427, 34075), (430, 34084), (473, 34231), (497, 34315), (503, 34348), (509, 34396), (522, 34462), (524, 34468), (526, 34480), (537, 34510), (540, 34516), (553, 34552), (557, 34561), (572, 34606),

Gene: Getalong_30 Start: 22921, Stop: 24756, Start Num: 34

Candidate Starts for Getalong_30:

(Start: 34 @22921 has 21 MA's), (90, 23083), (103, 23113), (129, 23167), (138, 23182), (143, 23194), (145, 23197), (152, 23212), (154, 23215), (155, 23218), (192, 23308), (196, 23317), (197, 23320), (226, 23407), (232, 23428), (234, 23434), (243, 23455), (244, 23464), (250, 23485), (252, 23491), (306, 23593), (307, 23596), (325, 23626), (330, 23638), (345, 23662), (369, 23737), (374, 23749), (381, 23791), (387, 23824), (397, 23857), (400, 23863), (408, 23887), (415, 23899), (432, 23956), (436, 23974), (477, 24106), (485, 24130), (488, 24148), (515, 24301), (520, 24316), (521, 24328), (522, 24331), (524, 24337), (539, 24382), (543, 24400), (547, 24412), (549, 24418), (557, 24430), (561, 24439), (580, 24493), (598, 24562), (606, 24595), (609, 24601), (625, 24664), (626, 24667), (629, 24685), (635, 24706), (636, 24715),

Gene: Gezellig_34 Start: 28352, Stop: 30274, Start Num: 29

Candidate Starts for Gezellig_34:

(Start: 29 @28352 has 37 MA's), (63, 28475), (72, 28496), (95, 28544), (Start: 149 @28652 has 1 MA's), (160, 28673), (192, 28754), (203, 28790), (205, 28793), (231, 28871), (232, 28874), (234, 28880), (243, 28901), (250, 28931), (252, 28937), (304, 29072), (339, 29159), (344, 29168), (346, 29174), (348, 29180), (369, 29255), (377, 29288), (381, 29309), (400, 29381), (408, 29405), (415, 29417), (432, 29474), (477, 29624), (485, 29648), (515, 29816), (520, 29831), (547, 29927), (589, 30038), (597, 30074),

Gene: Gibbles_26 Start: 31491, Stop: 33176, Start Num: 130

Candidate Starts for Gibbles_26:

(Start: 130 @31491 has 5 MA's), (162, 31554), (173, 31599), (184, 31635), (197, 31665), (280, 31914), (311, 32007), (338, 32076), (355, 32133), (357, 32139), (364, 32160), (369, 32178), (383, 32241), (462, 32469), (481, 32538), (483, 32541), (485, 32550), (498, 32616), (513, 32727), (536, 32820), (542, 32841), (611, 33039), (622, 33072),

Gene: Gizermo_25 Start: 20505, Stop: 22028, Start Num: 199

Candidate Starts for Gizermo_25:

(Start: 199 @20505 has 19 MA's), (227, 20577), (230, 20589), (238, 20616), (242, 20622), (246, 20640), (286, 20760), (288, 20769), (313, 20835), (357, 20949), (371, 20991), (377, 21021), (383, 21051), (398, 21111), (404, 21117), (415, 21141), (422, 21165), (430, 21183), (432, 21195), (436, 21213), (441, 21228), (444, 21234), (460, 21285), (467, 21312), (485, 21363), (512, 21531), (545, 21669), (554, 21690), (555, 21693), (559, 21705), (572, 21744), (612, 21891), (625, 21951), (626, 21954),

Gene: GodonK_92 Start: 54828, Stop: 56522, Start Num: 77

Candidate Starts for GodonK_92:

(Start: 77 @54828 has 6 MA's), (85, 54846), (89, 54852), (139, 54942), (142, 54948), (143, 54951), (160, 54972), (218, 55125), (220, 55128), (231, 55167), (264, 55263), (266, 55266), (277, 55299), (318, 55404), (348, 55455), (369, 55530), (381, 55584), (389, 55620), (405, 55662), (411, 55677), (477, 55887), (485, 55911), (508, 56043), (522, 56115), (548, 56205), (561, 56229), (563, 56238), (565, 56244), (570, 56262), (594, 56313),

Gene: Groundhog_27 Start: 21477, Stop: 23198, Start Num: 68

Candidate Starts for Groundhog_27:

(Start: 68 @21477 has 11 MA's), (147, 21621), (155, 21636), (196, 21735), (226, 21825), (235, 21861), (243, 21882), (267, 21954), (274, 21978), (290, 22032), (337, 22134), (373, 22230), (382, 22284), (393, 22332), (440, 22461), (449, 22479), (487, 22605), (528, 22809), (529, 22818), (558, 22899), (593, 22995), (619, 23094), (638, 23181),

Gene: Gustavo_36 Start: 31956, Stop: 33677, Start Num: 92

Candidate Starts for Gustavo_36:

(Start: 92 @31956 has 22 MA's), (151, 32079), (157, 32091), (177, 32157), (203, 32226), (219, 32262), (229, 32301), (291, 32487), (310, 32526), (333, 32586), (349, 32631), (367, 32691), (403, 32826), (405, 32832), (421, 32874), (427, 32889), (435, 32925), (446, 32946), (473, 33045), (497, 33129), (503, 33162), (508, 33207), (509, 33210), (515, 33246), (524, 33282), (526, 33294), (540, 33330), (553, 33366), (572, 33420),

Gene: GuuelaD_20 Start: 19262, Stop: 21058, Start Num: 53

Candidate Starts for GuuelaD_20:

(Start: 52 @19259 has 5 MA's), (Start: 53 @19262 has 23 MA's), (121, 19415), (136, 19439), (168, 19514), (172, 19535), (176, 19544), (214, 19646), (241, 19739), (248, 19763), (278, 19847), (290, 19892), (305, 19928), (311, 19943), (354, 20048), (366, 20081), (372, 20099), (373, 20102), (378, 20141), (386, 20180), (407, 20240), (409, 20243), (436, 20327), (440, 20336), (452, 20363), (486, 20474), (520, 20645), (538, 20720), (544, 20729), (556, 20756), (567, 20789), (573, 20804), (578, 20819), (581, 20825), (600, 20903), (601, 20906), (618, 20954), (637, 21041),

Gene: Hafay_20 Start: 19261, Stop: 21057, Start Num: 53

Candidate Starts for Hafay_20:

(Start: 52 @19258 has 5 MA's), (Start: 53 @19261 has 23 MA's), (121, 19414), (136, 19438), (172, 19534), (176, 19543), (193, 19585), (195, 19588), (203, 19618), (214, 19645), (241, 19738), (248, 19762), (278, 19846), (290, 19891), (305, 19927), (354, 20047), (362, 20065), (366, 20080), (372, 20098), (373, 20101), (386, 20179), (406, 20236), (407, 20239), (409, 20242), (436, 20326), (440, 20335), (452, 20362), (486, 20473), (487, 20476), (520, 20644), (538, 20719), (544, 20728), (556,

20755), (567, 20788), (573, 20803), (578, 20818), (581, 20824), (600, 20902), (601, 20905), (637, 21040),

Gene: Haley23_25 Start: 20505, Stop: 22028, Start Num: 199

Candidate Starts for Haley23_25:

(Start: 199 @20505 has 19 MA's), (227, 20577), (230, 20589), (238, 20616), (242, 20622), (246, 20640), (286, 20760), (288, 20769), (313, 20835), (357, 20949), (371, 20991), (377, 21021), (383, 21051), (398, 21111), (404, 21117), (415, 21141), (422, 21165), (430, 21183), (432, 21195), (436, 21213), (441, 21228), (444, 21234), (460, 21285), (467, 21312), (485, 21363), (512, 21531), (545, 21669), (554, 21690), (555, 21693), (559, 21705), (572, 21744), (612, 21891), (625, 21951), (626, 21954),

Gene: Halo3_34 Start: 28645, Stop: 30567, Start Num: 29

Candidate Starts for Halo3_34:

(Start: 29 @28645 has 37 MA's), (63, 28768), (72, 28789), (95, 28837), (Start: 149 @28945 has 1 MA's), (160, 28966), (192, 29047), (203, 29083), (205, 29086), (231, 29164), (232, 29167), (234, 29173), (243, 29194), (250, 29224), (252, 29230), (304, 29365), (339, 29452), (344, 29461), (346, 29467), (348, 29473), (377, 29581), (381, 29602), (400, 29674), (408, 29698), (415, 29710), (432, 29767), (477, 29917), (485, 29941), (515, 30109), (520, 30124), (547, 30220), (589, 30331), (597, 30367),

Gene: Heinz_26 Start: 19746, Stop: 21263, Start Num: 183

Candidate Starts for Heinz_26:

(Start: 183 @19746 has 1 MA's), (223, 19845), (250, 19941), (257, 19956), (259, 19962), (289, 20055), (303, 20097), (307, 20106), (342, 20190), (349, 20211), (381, 20331), (391, 20370), (397, 20400), (412, 20427), (421, 20454), (430, 20478), (444, 20526), (448, 20535), (450, 20538), (472, 20625), (473, 20628), (497, 20712), (535, 20919), (571, 21015), (589, 21063), (597, 21099), (602, 21123), (620, 21162), (634, 21234), (638, 21249),

Gene: Herbertwm_29 Start: 21904, Stop: 23925, Start Num: 18

Candidate Starts for Herbertwm_29:

(Start: 18 @21904 has 2 MA's), (42, 22018), (62, 22090), (109, 22192), (154, 22273), (172, 22330), (192, 22378), (225, 22480), (243, 22540), (290, 22690), (298, 22708), (305, 22726), (331, 22783), (348, 22822), (370, 22885), (373, 22891), (374, 22894), (379, 22936), (442, 23122), (445, 23128), (452, 23146), (480, 23239), (499, 23323), (525, 23467), (545, 23557), (567, 23614), (578, 23650), (596, 23698), (599, 23728), (600, 23731), (625, 23818), (642, 23893),

Gene: Herod_26 Start: 22926, Stop: 24431, Start Num: 194

Candidate Starts for Herod_26:

(60, 22611), (108, 22719), (144, 22788), (Start: 146 @22791 has 5 MA's), (158, 22815), (161, 22821), (Start: 194 @22926 has 29 MA's), (218, 22995), (222, 23007), (254, 23118), (257, 23124), (259, 23130), (261, 23136), (289, 23223), (302, 23259), (303, 23265), (307, 23274), (397, 23568), (421, 23622), (422, 23625), (430, 23646), (443, 23691), (473, 23796), (497, 23880), (508, 23961), (509, 23964), (571, 24183), (589, 24231), (602, 24291), (617, 24324), (620, 24330), (634, 24402),

Gene: Hibiscus_25 Start: 19694, Stop: 21211, Start Num: 183

Candidate Starts for Hibiscus_25:

(Start: 183 @19694 has 1 MA's), (223, 19793), (250, 19889), (257, 19904), (259, 19910), (289, 20003), (303, 20045), (307, 20054), (342, 20138), (349, 20159), (381, 20279), (391, 20318), (397, 20348), (412, 20375), (421, 20402), (430, 20426), (444, 20474), (448, 20483), (450, 20486), (472, 20573), (473, 20576), (497, 20660), (535, 20867), (571, 20963), (589, 21011), (597, 21047), (602, 21071), (620, 21110), (634, 21182), (638, 21197),

Gene: Holliday_29 Start: 22226, Stop: 24061, Start Num: 34

Candidate Starts for Holliday_29:

(Start: 34 @22226 has 21 MA's), (90, 22388), (103, 22418), (129, 22472), (138, 22487), (143, 22499), (145, 22502), (152, 22517), (154, 22520), (155, 22523), (192, 22613), (196, 22622), (197, 22625), (226, 22712), (232, 22733), (234, 22739), (243, 22760), (244, 22769), (250, 22790), (252, 22796), (306, 22898), (307, 22901), (325, 22931), (330, 22943), (345, 22967), (369, 23042), (374, 23054), (381, 23096), (387, 23129), (397, 23162), (400, 23168), (408, 23192), (415, 23204), (432, 23261), (436, 23279), (477, 23411), (485, 23435), (488, 23453), (515, 23606), (520, 23621), (521, 23633), (522, 23636), (524, 23642), (539, 23687), (543, 23705), (547, 23717), (549, 23723), (557, 23735), (561, 23744), (580, 23798), (598, 23867), (606, 23900), (609, 23906), (625, 23969), (626, 23972), (629, 23990), (635, 24011), (636, 24020),

Gene: Horus_29 Start: 22143, Stop: 23978, Start Num: 34

Candidate Starts for Horus_29:

(Start: 34 @22143 has 21 MA's), (90, 22305), (103, 22335), (129, 22389), (138, 22404), (143, 22416), (145, 22419), (152, 22434), (154, 22437), (155, 22440), (192, 22530), (196, 22539), (197, 22542), (226, 22629), (232, 22650), (234, 22656), (243, 22677), (244, 22686), (250, 22707), (252, 22713), (306, 22815), (307, 22818), (325, 22848), (330, 22860), (345, 22884), (347, 22893), (369, 22959), (374, 22971), (381, 23013), (387, 23046), (397, 23079), (400, 23085), (408, 23109), (415, 23121), (432, 23178), (436, 23196), (477, 23328), (485, 23352), (488, 23370), (515, 23523), (520, 23538), (522, 23553), (524, 23559), (539, 23604), (543, 23622), (547, 23634), (549, 23640), (557, 23652), (561, 23661), (580, 23715), (598, 23784), (606, 23817), (609, 23823), (625, 23886), (626, 23889), (629, 23907), (635, 23928), (636, 23937),

Gene: Hugley_26 Start: 22926, Stop: 24431, Start Num: 194

Candidate Starts for Hugley_26:

(60, 22611), (108, 22719), (144, 22788), (Start: 146 @22791 has 5 MA's), (158, 22815), (161, 22821), (Start: 194 @22926 has 29 MA's), (218, 22995), (222, 23007), (254, 23118), (257, 23124), (259, 23130), (261, 23136), (289, 23223), (302, 23259), (303, 23265), (307, 23274), (397, 23568), (421, 23622), (422, 23625), (430, 23646), (443, 23691), (473, 23796), (497, 23880), (508, 23961), (509, 23964), (571, 24183), (589, 24231), (602, 24291), (617, 24324), (620, 24330), (634, 24402),

Gene: Hyzer_28 Start: 23631, Stop: 25250, Start Num: 164

Candidate Starts for Hyzer_28:

(81, 23460), (83, 23463), (Start: 164 @23631 has 1 MA's), (Start: 190 @23709 has 1 MA's), (193, 23712), (206, 23739), (233, 23823), (237, 23838), (238, 23841), (256, 23892), (270, 23937), (286, 23985), (314, 24063), (357, 24174), (371, 24216), (377, 24246), (383, 24276), (415, 24366), (422, 24390), (430, 24408), (432, 24420), (436, 24438), (441, 24453), (444, 24459), (460, 24510), (467, 24537), (485, 24588), (504, 24678), (512, 24756), (522, 24798), (535, 24858), (545, 24894), (554, 24915), (555, 24918), (559, 24930), (572, 24969), (625, 25176), (626, 25179), (632, 25203),

Gene: Itos_20 Start: 19225, Stop: 21024, Start Num: 52

Candidate Starts for Itos_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386, 20146), (406, 20203), (409, 20209), (436, 20293), (440, 20302), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (544, 20695), (556, 20722), (562, 20740), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: JCole_23 Start: 19364, Stop: 20980, Start Num: 148

Candidate Starts for JCole_23:

(148, 19364), (177, 19436), (186, 19448), (203, 19496), (226, 19559), (232, 19580), (240, 19601), (244, 19616), (250, 19637), (252, 19643), (304, 19778), (309, 19787), (324, 19826), (326, 19835), (346, 19880), (348, 19886), (369, 19961), (377, 19994), (381, 20015), (397, 20081), (408, 20111), (415, 20123), (430, 20168), (436, 20198), (471, 20315), (477, 20330), (485, 20354), (494, 20396), (514, 20522), (515, 20525), (526, 20573), (547, 20636), (611, 20831), (618, 20855), (623, 20870), (625, 20891),

Gene: JKSyngboy_34 Start: 32531, Stop: 34252, Start Num: 92

Candidate Starts for JKSyngboy_34:

(Start: 92 @32531 has 22 MA's), (151, 32654), (157, 32666), (177, 32732), (203, 32801), (219, 32837), (291, 33062), (310, 33101), (333, 33161), (349, 33206), (367, 33266), (395, 33392), (403, 33401), (405, 33407), (421, 33449), (427, 33464), (430, 33473), (435, 33500), (446, 33521), (473, 33620), (497, 33704), (524, 33857), (526, 33869), (531, 33884), (540, 33905), (572, 33995), (598, 34088),

Gene: JSwag_33 Start: 21729, Stop: 23441, Start Num: 45

Candidate Starts for JSwag_33:

(Start: 45 @21729 has 20 MA's), (82, 21822), (155, 21972), (169, 22011), (Start: 179 @22041 has 1 MA's), (233, 22167), (234, 22170), (281, 22308), (298, 22365), (342, 22410), (359, 22416), (376, 22482), (386, 22536), (428, 22650), (432, 22668), (436, 22686), (461, 22743), (505, 22920), (536, 23079), (547, 23115), (590, 23232), (600, 23283), (621, 23343), (627, 23379), (638, 23427),

Gene: Jabberwocky_35 Start: 33678, Stop: 35399, Start Num: 92

Candidate Starts for Jabberwocky_35:

(Start: 92 @33678 has 22 MA's), (157, 33813), (170, 33855), (177, 33879), (229, 34023), (291, 34209), (310, 34248), (312, 34257), (341, 34329), (349, 34353), (371, 34425), (391, 34512), (403, 34548), (405, 34554), (421, 34596), (427, 34611), (430, 34620), (473, 34767), (497, 34851), (503, 34884), (509, 34932), (522, 34998), (524, 35004), (526, 35016), (537, 35046), (540, 35052), (553, 35088), (557, 35097), (572, 35142),

Gene: Jambalaya_33 Start: 27999, Stop: 29921, Start Num: 29

Candidate Starts for Jambalaya_33:

(Start: 29 @27999 has 37 MA's), (63, 28122), (72, 28143), (95, 28191), (Start: 149 @28299 has 1 MA's), (160, 28320), (192, 28401), (203, 28437), (205, 28440), (231, 28518), (232, 28521), (234, 28527), (243, 28548), (250, 28578), (252, 28584), (304, 28719), (339, 28806), (344, 28815), (346, 28821), (348, 28827), (369, 28902), (377, 28935), (381, 28956), (400, 29028), (408, 29052), (415, 29064), (432, 29121), (477, 29271), (485, 29295), (515, 29463), (520, 29478), (547, 29574), (589, 29685), (597, 29721),

Gene: Jojo24_25 Start: 19691, Stop: 21388, Start Num: 87

Candidate Starts for Jojo24_25:

(57, 19616), (Start: 87 @19691 has 3 MA's), (142, 19790), (186, 19886), (192, 19901), (195, 19907), (231, 20018), (232, 20021), (234, 20027), (243, 20048), (247, 20066), (253, 20084), (266, 20117), (272, 20138), (290, 20186), (322, 20255), (343, 20291), (345, 20294), (369, 20375), (374, 20387), (381, 20429), (404, 20510), (405, 20513), (408, 20522), (415, 20534), (427, 20570), (432, 20591), (436, 20609), (441, 20624), (477, 20741), (485, 20765), (488, 20783), (515, 20936), (539, 21035), (543, 21053), (547, 21065), (561, 21092), (619, 21269), (627, 21308),

Gene: JonJames_55 Start: 39392, Stop: 41158, Start Num: 55

Candidate Starts for JonJames_55:

(Start: 55 @39392 has 2 MA's), (61, 39413), (197, 39707), (201, 39725), (205, 39734), (217, 39767), (243, 39851), (276, 39950), (341, 40097), (350, 40118), (369, 40184), (375, 40202), (383, 40247), (432, 40391), (444, 40430), (477, 40541), (506, 40667), (522, 40763), (533, 40805), (535, 40811), (549, 40853), (551, 40856),

Gene: Kahlid_20 Start: 19233, Stop: 21029, Start Num: 53

Candidate Starts for Kahlid_20:

(Start: 52 @19230 has 5 MA's), (Start: 53 @19233 has 23 MA's), (121, 19386), (136, 19410), (172, 19506), (176, 19515), (193, 19557), (195, 19560), (203, 19590), (214, 19617), (241, 19710), (248, 19734), (278, 19818), (290, 19863), (305, 19899), (354, 20019), (362, 20037), (366, 20052), (372, 20070), (373, 20073), (386, 20151), (406, 20208), (407, 20211), (409, 20214), (436, 20298), (440, 20307), (452, 20334), (486, 20445), (487, 20448), (520, 20616), (538, 20691), (544, 20700), (556, 20727), (567, 20760), (573, 20775), (578, 20790), (581, 20796), (600, 20874), (601, 20877), (618, 20925), (637, 21012),

Gene: Kamaru_29 Start: 22226, Stop: 24061, Start Num: 34

Candidate Starts for Kamaru_29:

(Start: 34 @22226 has 21 MA's), (90, 22388), (103, 22418), (129, 22472), (138, 22487), (143, 22499), (145, 22502), (152, 22517), (154, 22520), (155, 22523), (192, 22613), (196, 22622), (197, 22625), (226, 22712), (232, 22733), (234, 22739), (243, 22760), (244, 22769), (250, 22790), (252, 22796), (306, 22898), (307, 22901), (325, 22931), (330, 22943), (345, 22967), (369, 23042), (374, 23054), (381, 23096), (387, 23129), (397, 23162), (400, 23168), (408, 23192), (415, 23204), (432, 23261), (436, 23279), (477, 23411), (485, 23435), (488, 23453), (515, 23606), (520, 23621), (521, 23633), (522, 23636), (524, 23642), (539, 23687), (543, 23705), (547, 23717), (549, 23723), (557, 23735), (561, 23744), (580, 23798), (598, 23867), (606, 23900), (609, 23906), (625, 23969), (626, 23972), (629, 23990), (635, 24011), (636, 24020),

Gene: Kamashten_36 Start: 33130, Stop: 35052, Start Num: 29

Candidate Starts for Kamashten_36:

(Start: 29 @33130 has 37 MA's), (69, 33265), (Start: 73 @33274 has 1 MA's), (90, 33307), (101, 33331), (135, 33400), (167, 33475), (232, 33667), (234, 33673), (243, 33694), (247, 33712), (250, 33724), (272, 33784), (292, 33838), (345, 33952), (369, 34039), (381, 34093), (393, 34147), (397, 34159), (408, 34189), (415, 34201), (430, 34246), (432, 34258), (436, 34276), (447, 34303), (468, 34381), (477, 34408), (485, 34432), (508, 34555), (514, 34597), (539, 34681), (547, 34711), (561, 34738), (580, 34792), (592, 34822), (606, 34894), (611, 34903),

Gene: Kampe_27 Start: 31352, Stop: 33037, Start Num: 130

Candidate Starts for Kampe_27:

(Start: 130 @31352 has 5 MA's), (162, 31415), (173, 31460), (184, 31496), (197, 31526), (280, 31775), (311, 31868), (338, 31937), (355, 31994), (357, 32000), (364, 32021), (369, 32039), (383, 32102), (462, 32330), (485, 32411), (498, 32477), (513, 32588), (536, 32681), (542, 32702), (611, 32900), (622, 32933),

Gene: KatherineG_33 Start: 21865, Stop: 23577, Start Num: 45

Candidate Starts for KatherineG_33:

(Start: 45 @21865 has 20 MA's), (82, 21958), (155, 22108), (169, 22147), (Start: 179 @22177 has 1 MA's), (233, 22303), (234, 22306), (281, 22444), (298, 22501), (342, 22546), (359, 22552), (376, 22618), (386, 22672), (428, 22786), (432, 22804), (436, 22822), (461, 22879), (505, 23056), (536, 23215), (547, 23251), (590, 23368), (600, 23419), (621, 23479), (627, 23515), (638, 23563),

Gene: Keitabear_38 Start: 35100, Stop: 37022, Start Num: 29

Candidate Starts for Keitabear_38:

(Start: 29 @35100 has 37 MA's), (69, 35235), (90, 35277), (101, 35301), (135, 35370), (167, 35445), (232, 35637), (234, 35643), (243, 35664), (247, 35682), (250, 35694), (272, 35754), (292, 35808), (345, 35922), (369, 36009), (381, 36063), (397, 36129), (408, 36159), (415, 36171), (430, 36216), (432, 36228), (436, 36246), (447, 36273), (468, 36351), (477, 36378), (485, 36402), (508, 36525), (514, 36567), (539, 36651), (547, 36681), (580, 36762), (592, 36792), (606, 36864), (611, 36873),

Gene: Kenna_28 Start: 22119, Stop: 23954, Start Num: 34

Candidate Starts for Kenna_28:

(Start: 34 @22119 has 21 MA's), (90, 22281), (103, 22311), (129, 22365), (138, 22380), (143, 22392), (145, 22395), (152, 22410), (154, 22413), (155, 22416), (192, 22506), (196, 22515), (197, 22518), (226, 22605), (232, 22626), (234, 22632), (243, 22653), (244, 22662), (250, 22683), (252, 22689), (306, 22791), (307, 22794), (325, 22824), (330, 22836), (345, 22860), (369, 22935), (374, 22947), (381, 22989), (387, 23022), (397, 23055), (400, 23061), (408, 23085), (415, 23097), (432, 23154), (436, 23172), (477, 23304), (485, 23328), (488, 23346), (515, 23499), (520, 23514), (522, 23529), (524, 23535), (539, 23580), (543, 23598), (547, 23610), (549, 23616), (557, 23628), (561, 23637), (580, 23691), (598, 23760), (606, 23793), (609, 23799), (625, 23862), (626, 23865), (629, 23883), (635, 23904), (636, 23913),

Gene: Kewpiedoll_36 Start: 32537, Stop: 34258, Start Num: 92

Candidate Starts for Kewpiedoll_36:

(Start: 92 @32537 has 22 MA's), (157, 32672), (162, 32681), (170, 32714), (177, 32738), (203, 32807), (229, 32882), (291, 33068), (310, 33107), (312, 33116), (317, 33131), (341, 33188), (349, 33212), (371, 33284), (391, 33371), (403, 33407), (405, 33413), (421, 33455), (427, 33470), (430, 33479), (473, 33626), (497, 33710), (503, 33743), (509, 33791), (522, 33857), (524, 33863), (526, 33875), (537, 33905), (540, 33911), (553, 33947), (557, 33956), (572, 34001),

Gene: KimmyK_35 Start: 28934, Stop: 30856, Start Num: 29

Candidate Starts for KimmyK_35:

(Start: 29 @28934 has 37 MA's), (63, 29057), (72, 29078), (95, 29126), (Start: 149 @29234 has 1 MA's), (160, 29255), (192, 29336), (203, 29372), (205, 29375), (231, 29453), (232, 29456), (234, 29462), (243, 29483), (250, 29513), (252, 29519), (304, 29654), (339, 29741), (344, 29750), (346, 29756), (348, 29762), (369, 29837), (377, 29870), (381, 29891), (400, 29963), (408, 29987), (415, 29999), (432, 30056), (477, 30206), (485, 30230), (515, 30398), (520, 30413), (547, 30509), (589, 30620), (597, 30656),

Gene: Kita_28 Start: 22923, Stop: 24428, Start Num: 194

Candidate Starts for Kita_28:

(Start: 194 @22923 has 29 MA's), (218, 22992), (222, 23004), (254, 23115), (259, 23127), (261, 23133), (289, 23220), (302, 23256), (303, 23262), (307, 23271), (397, 23565), (421, 23619), (422, 23622), (430, 23643), (443, 23688), (473, 23793), (497, 23877), (508, 23958), (509, 23961), (535, 24084), (571, 24180), (589, 24228), (602, 24288), (617, 24321), (620, 24327), (634, 24399),

Gene: Kroos_37 Start: 32709, Stop: 34430, Start Num: 92

Candidate Starts for Kroos_37:

(Start: 92 @32709 has 22 MA's), (151, 32832), (157, 32844), (177, 32910), (203, 32979), (219, 33015), (229, 33054), (291, 33240), (310, 33279), (333, 33339), (349, 33384), (367, 33444), (403, 33579), (405, 33585), (421, 33627), (427, 33642), (435, 33678), (446, 33699), (473, 33798), (497, 33882), (503, 33915), (508, 33960), (509, 33963), (515, 33999), (524, 34035), (526, 34047), (540, 34083), (553, 34119), (572, 34173),

Gene: Kudfre_29 Start: 24004, Stop: 25656, Start Num: 98

Candidate Starts for Kudfre_29:

(79, 23965), (Start: 98 @24004 has 9 MA's), (109, 24025), (187, 24178), (189, 24184), (Start: 190 @24187 has 1 MA's), (197, 24202), (208, 24235), (211, 24244), (219, 24256), (231, 24298), (232, 24301), (234, 24307), (238, 24319), (243, 24328), (247, 24346), (250, 24358), (252, 24364), (277, 24430), (283, 24445), (285, 24451), (341, 24586), (350, 24613), (351, 24619), (377, 24712), (415, 24832), (430, 24874), (432, 24886), (477, 25036), (485, 25060), (488, 25078), (503, 25141), (515, 25228), (520, 25243), (524, 25264), (539, 25309), (543, 25327), (551, 25348), (566, 25390), (574,

25414), (594, 25462), (614, 25537), (625, 25588), (639, 25651),

Gene: Kuwabara_28 Start: 21545, Stop: 23329, Start Num: 34

Candidate Starts for Kuwabara_28:

(Start: 34 @21545 has 21 MA's), (38, 21560), (48, 21587), (59, 21617), (91, 21689), (96, 21701),
(Start: 130 @21764 has 5 MA's), (138, 21776), (161, 21818), (178, 21857), (185, 21866), (214, 21944),
(232, 22001), (234, 22007), (243, 22028), (244, 22037), (250, 22058), (252, 22064), (306, 22166),
(307, 22169), (325, 22199), (330, 22211), (345, 22235), (347, 22244), (369, 22310), (374, 22322),
(381, 22364), (387, 22397), (397, 22430), (400, 22436), (408, 22460), (415, 22472), (432, 22529),
(436, 22547), (477, 22679), (485, 22703), (488, 22721), (515, 22874), (520, 22889), (522, 22904),
(524, 22910), (539, 22955), (543, 22973), (547, 22985), (549, 22991), (557, 23003), (561, 23012),
(580, 23066), (598, 23135), (606, 23168), (609, 23174), (625, 23237), (626, 23240), (629, 23258),
(635, 23279), (636, 23288),

Gene: Kwobi_37 Start: 32695, Stop: 34416, Start Num: 92

Candidate Starts for Kwobi_37:

(Start: 92 @32695 has 22 MA's), (151, 32818), (157, 32830), (177, 32896), (203, 32965), (219, 33001),
(291, 33226), (310, 33265), (333, 33325), (349, 33370), (367, 33430), (403, 33565), (405, 33571),
(421, 33613), (427, 33628), (435, 33664), (446, 33685), (473, 33784), (497, 33868), (503, 33901),
(508, 33946), (509, 33949), (515, 33985), (524, 34021), (526, 34033), (540, 34069), (553, 34105),
(572, 34159),

Gene: Lamberg_24 Start: 19408, Stop: 20961, Start Num: 153

Candidate Starts for Lamberg_24:

(Start: 153 @19408 has 3 MA's), (177, 19477), (187, 19492), (201, 19534), (203, 19540), (232, 19624),
(234, 19630), (243, 19651), (247, 19669), (251, 19681), (253, 19687), (327, 19843), (351, 19885),
(377, 19978), (381, 19999), (397, 20065), (408, 20095), (415, 20107), (432, 20164), (477, 20314),
(485, 20338), (515, 20506), (539, 20605), (543, 20623), (547, 20635), (611, 20812), (619, 20839),
(627, 20878),

Gene: LastResort_33 Start: 21746, Stop: 23458, Start Num: 45

Candidate Starts for LastResort_33:

(Start: 45 @21746 has 20 MA's), (82, 21839), (155, 21989), (169, 22028), (Start: 179 @22058 has 1
MA's), (233, 22184), (234, 22187), (281, 22325), (298, 22382), (342, 22427), (359, 22433), (376,
22499), (386, 22553), (432, 22685), (436, 22703), (461, 22760), (505, 22937), (536, 23096), (547,
23132), (590, 23249), (600, 23300), (621, 23360), (627, 23396), (638, 23444),

Gene: Lennon_38 Start: 34887, Stop: 36809, Start Num: 29

Candidate Starts for Lennon_38:

(Start: 29 @34887 has 37 MA's), (69, 35022), (Start: 73 @35031 has 1 MA's), (90, 35064), (101,
35088), (135, 35157), (167, 35232), (232, 35424), (234, 35430), (243, 35451), (247, 35469), (250,
35481), (272, 35541), (292, 35595), (345, 35709), (369, 35796), (381, 35850), (393, 35904), (397,
35916), (408, 35946), (415, 35958), (430, 36003), (432, 36015), (436, 36033), (447, 36060), (468,
36138), (477, 36165), (485, 36189), (508, 36312), (514, 36354), (539, 36438), (547, 36468), (580,
36549), (592, 36579), (606, 36651), (611, 36660),

Gene: Leroy_29 Start: 22144, Stop: 23979, Start Num: 34

Candidate Starts for Leroy_29:

(Start: 34 @22144 has 21 MA's), (90, 22306), (103, 22336), (129, 22390), (138, 22405), (143, 22417),
(145, 22420), (152, 22435), (154, 22438), (155, 22441), (192, 22531), (196, 22540), (197, 22543),
(226, 22630), (232, 22651), (234, 22657), (243, 22678), (244, 22687), (250, 22708), (252, 22714),
(306, 22816), (307, 22819), (325, 22849), (330, 22861), (345, 22885), (347, 22894), (369, 22960),
(374, 22972), (381, 23014), (387, 23047), (397, 23080), (400, 23086), (408, 23110), (415, 23122),

(432, 23179), (436, 23197), (477, 23329), (485, 23353), (488, 23371), (515, 23524), (520, 23539), (522, 23554), (524, 23560), (539, 23605), (543, 23623), (547, 23635), (549, 23641), (557, 23653), (561, 23662), (580, 23716), (598, 23785), (606, 23818), (609, 23824), (625, 23887), (626, 23890), (629, 23908), (635, 23929), (636, 23938),

Gene: Lewan_20 Start: 19228, Stop: 21024, Start Num: 53

Candidate Starts for Lewan_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (305, 19894), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386, 20146), (406, 20203), (407, 20206), (409, 20209), (428, 20257), (436, 20293), (440, 20302), (452, 20329), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (544, 20695), (556, 20722), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: LilDestine_20 Start: 19227, Stop: 21023, Start Num: 53

Candidate Starts for LilDestine_20:

(Start: 52 @19224 has 5 MA's), (Start: 53 @19227 has 23 MA's), (121, 19380), (136, 19404), (172, 19500), (176, 19509), (193, 19551), (195, 19554), (203, 19584), (214, 19611), (241, 19704), (248, 19728), (278, 19812), (290, 19857), (305, 19893), (354, 20013), (362, 20031), (366, 20046), (372, 20064), (373, 20067), (386, 20145), (406, 20202), (407, 20205), (409, 20208), (436, 20292), (440, 20301), (452, 20328), (486, 20439), (487, 20442), (520, 20610), (538, 20685), (544, 20694), (556, 20721), (567, 20754), (573, 20769), (578, 20784), (581, 20790), (600, 20868), (601, 20871), (618, 20919), (637, 21006),

Gene: LilHam_34 Start: 31298, Stop: 33019, Start Num: 92

Candidate Starts for LilHam_34:

(Start: 92 @31298 has 22 MA's), (151, 31421), (157, 31433), (177, 31499), (203, 31568), (219, 31604), (291, 31829), (310, 31868), (333, 31928), (349, 31973), (367, 32033), (403, 32168), (405, 32174), (421, 32216), (427, 32231), (435, 32267), (446, 32288), (473, 32387), (497, 32471), (503, 32504), (508, 32549), (509, 32552), (515, 32588), (524, 32624), (526, 32636), (540, 32672), (553, 32708), (572, 32762),

Gene: Lilas_28 Start: 22772, Stop: 24724, Start Num: 19

Candidate Starts for Lilas_28:

(1, 22484), (2, 22541), (4, 22556), (6, 22592), (7, 22637), (8, 22640), (Start: 19 @22772 has 8 MA's), (Start: 22 @22787 has 1 MA's), (27, 22826), (28, 22829), (114, 23057), (132, 23084), (Start: 141 @23099 has 1 MA's), (232, 23333), (234, 23339), (238, 23351), (266, 23429), (272, 23450), (320, 23570), (341, 23612), (369, 23705), (374, 23717), (381, 23759), (408, 23849), (415, 23861), (432, 23918), (441, 23951), (455, 23984), (469, 24044), (477, 24068), (484, 24086), (515, 24260), (517, 24266), (528, 24314), (598, 24536), (623, 24617), (625, 24638),

Gene: LilyPad_26 Start: 21924, Stop: 23648, Start Num: 65

Candidate Starts for LilyPad_26:

(Start: 65 @21924 has 2 MA's), (101, 21999), (103, 22005), (107, 22014), (128, 22056), (182, 22188), (210, 22266), (212, 22272), (224, 22308), (247, 22392), (273, 22467), (281, 22488), (287, 22512), (308, 22566), (340, 22620), (361, 22674), (367, 22683), (368, 22686), (416, 22821), (417, 22824), (441, 22908), (457, 22959), (458, 22962), (463, 22980), (470, 23016), (487, 23055), (503, 23133), (522, 23247), (532, 23292), (549, 23346), (558, 23355), (561, 23361), (604, 23505), (613, 23523),

Gene: LitninMcQueen_28 Start: 21875, Stop: 23710, Start Num: 34

Candidate Starts for LitninMcQueen_28:

(Start: 34 @21875 has 21 MA's), (90, 22037), (103, 22067), (129, 22121), (138, 22136), (143, 22148), (145, 22151), (152, 22166), (154, 22169), (155, 22172), (192, 22262), (196, 22271), (197, 22274), (226, 22361), (232, 22382), (234, 22388), (243, 22409), (244, 22418), (250, 22439), (252, 22445), (306, 22547), (307, 22550), (325, 22580), (330, 22592), (345, 22616), (369, 22691), (374, 22703), (381, 22745), (387, 22778), (397, 22811), (400, 22817), (408, 22841), (415, 22853), (432, 22910), (436, 22928), (477, 23060), (485, 23084), (488, 23102), (515, 23255), (520, 23270), (521, 23282), (522, 23285), (524, 23291), (539, 23336), (543, 23354), (547, 23366), (549, 23372), (557, 23384), (561, 23393), (580, 23447), (589, 23471), (606, 23549), (609, 23555), (625, 23618), (626, 23621), (629, 23639), (635, 23660), (636, 23669),

Gene: LittleFella_27 Start: 23800, Stop: 25635, Start Num: 65

Candidate Starts for LittleFella_27:

(Start: 65 @23800 has 2 MA's), (101, 23875), (103, 23881), (107, 23890), (122, 23923), (128, 23932), (161, 23998), (210, 24130), (212, 24136), (224, 24172), (243, 24238), (247, 24256), (286, 24370), (313, 24445), (314, 24448), (357, 24559), (383, 24661), (405, 24730), (411, 24745), (415, 24751), (422, 24775), (444, 24844), (460, 24895), (470, 24940), (485, 24973), (511, 25153), (527, 25225), (583, 25408), (597, 25468),

Gene: Loadrie_20 Start: 19260, Stop: 21056, Start Num: 53

Candidate Starts for Loadrie_20:

(Start: 52 @19257 has 5 MA's), (Start: 53 @19260 has 23 MA's), (121, 19413), (136, 19437), (172, 19533), (176, 19542), (195, 19587), (203, 19617), (214, 19644), (241, 19737), (248, 19761), (278, 19845), (290, 19890), (362, 20064), (366, 20079), (372, 20097), (373, 20100), (386, 20178), (406, 20235), (409, 20241), (436, 20325), (440, 20334), (486, 20472), (487, 20475), (520, 20643), (538, 20718), (544, 20727), (556, 20754), (567, 20787), (573, 20802), (578, 20817), (581, 20823), (600, 20901), (601, 20904), (637, 21039),

Gene: Looper_34 Start: 21743, Stop: 23455, Start Num: 45

Candidate Starts for Looper_34:

(Start: 45 @21743 has 20 MA's), (82, 21836), (155, 21986), (169, 22025), (Start: 179 @22055 has 1 MA's), (233, 22181), (234, 22184), (281, 22322), (298, 22379), (342, 22424), (359, 22430), (376, 22496), (386, 22550), (428, 22664), (432, 22682), (436, 22700), (461, 22757), (505, 22934), (536, 23093), (547, 23129), (590, 23246), (600, 23297), (621, 23357), (627, 23393), (638, 23441),

Gene: LordFarquaad_25 Start: 20498, Stop: 22021, Start Num: 199

Candidate Starts for LordFarquaad_25:

(Start: 199 @20498 has 19 MA's), (227, 20570), (230, 20582), (238, 20609), (246, 20633), (286, 20753), (288, 20762), (313, 20828), (357, 20942), (371, 20984), (377, 21014), (383, 21044), (404, 21110), (415, 21134), (422, 21158), (430, 21176), (432, 21188), (436, 21206), (441, 21221), (444, 21227), (460, 21278), (467, 21305), (485, 21356), (512, 21524), (518, 21545), (534, 21623), (545, 21662), (554, 21683), (555, 21686), (559, 21698), (572, 21737), (612, 21884), (625, 21944), (626, 21947),

Gene: Love_41 Start: 34670, Stop: 36595, Start Num: 29

Candidate Starts for Love_41:

(Start: 29 @34670 has 37 MA's), (69, 34805), (Start: 73 @34814 has 1 MA's), (90, 34847), (101, 34871), (135, 34940), (167, 35015), (232, 35207), (234, 35213), (243, 35234), (247, 35252), (250, 35264), (272, 35324), (292, 35378), (345, 35495), (369, 35582), (381, 35636), (397, 35702), (408, 35732), (415, 35744), (430, 35789), (432, 35801), (436, 35819), (447, 35846), (468, 35924), (477, 35951), (485, 35975), (508, 36098), (514, 36140), (539, 36224), (547, 36254), (561, 36281), (580, 36335), (592, 36365), (606, 36437), (611, 36446),

Gene: Lozinak_57 Start: 35857, Stop: 37689, Start Num: 47

Candidate Starts for Lozinak_57:

(Start: 47 @35857 has 14 MA's), (94, 35962), (99, 35971), (131, 36025), (172, 36115), (188, 36154), (196, 36172), (233, 36256), (255, 36325), (353, 36595), (394, 36757), (428, 36841), (430, 36847), (465, 36967), (523, 37243), (534, 37300), (536, 37306), (577, 37423), (588, 37450), (607, 37534), (627, 37603),

Gene: Lton_24 Start: 19437, Stop: 21029, Start Num: 146

Candidate Starts for Lton_24:

(Start: 146 @19437 has 5 MA's), (177, 19506), (187, 19521), (189, 19527), (203, 19569), (214, 19596), (234, 19659), (243, 19680), (246, 19695), (266, 19749), (271, 19767), (272, 19770), (277, 19782), (350, 19947), (369, 20013), (377, 20046), (404, 20145), (408, 20157), (415, 20169), (432, 20226), (441, 20259), (444, 20265), (477, 20376), (515, 20571), (539, 20652), (547, 20682), (589, 20793), (595, 20808), (598, 20838), (606, 20871), (625, 20940),

Gene: Lucky10_25 Start: 20304, Stop: 22139, Start Num: 39

Candidate Starts for Lucky10_25:

(9, 20088), (14, 20124), (15, 20169), (16, 20184), (Start: 39 @20304 has 3 MA's), (54, 20361), (91, 20448), (96, 20460), (112, 20493), (116, 20499), (Start: 130 @20523 has 5 MA's), (138, 20535), (163, 20580), (175, 20610), (178, 20616), (185, 20625), (196, 20649), (209, 20691), (232, 20760), (234, 20766), (243, 20787), (247, 20805), (250, 20817), (252, 20823), (272, 20877), (369, 21132), (371, 21135), (381, 21186), (389, 21222), (397, 21252), (400, 21258), (408, 21282), (415, 21294), (432, 21351), (436, 21369), (477, 21501), (479, 21507), (485, 21525), (515, 21693), (539, 21774), (553, 21816), (561, 21831), (589, 21912), (597, 21948), (624, 22047),

Gene: Lutum_29 Start: 22119, Stop: 23954, Start Num: 34

Candidate Starts for Lutum_29:

(Start: 34 @22119 has 21 MA's), (90, 22281), (103, 22311), (129, 22365), (138, 22380), (143, 22392), (145, 22395), (152, 22410), (154, 22413), (155, 22416), (192, 22506), (196, 22515), (197, 22518), (226, 22605), (232, 22626), (234, 22632), (243, 22653), (244, 22662), (250, 22683), (252, 22689), (306, 22791), (307, 22794), (325, 22824), (330, 22836), (345, 22860), (369, 22935), (374, 22947), (381, 22989), (387, 23022), (397, 23055), (400, 23061), (408, 23085), (415, 23097), (432, 23154), (436, 23172), (477, 23304), (485, 23328), (488, 23346), (515, 23499), (520, 23514), (522, 23529), (524, 23535), (539, 23580), (543, 23598), (547, 23610), (549, 23616), (557, 23628), (561, 23637), (580, 23691), (598, 23760), (606, 23793), (609, 23799), (625, 23862), (626, 23865), (629, 23883), (635, 23904), (636, 23913),

Gene: Madeline_26 Start: 23224, Stop: 24729, Start Num: 194

Candidate Starts for Madeline_26:

(60, 22909), (108, 23017), (144, 23086), (Start: 146 @23089 has 5 MA's), (158, 23113), (161, 23119), (Start: 194 @23224 has 29 MA's), (218, 23293), (222, 23305), (254, 23416), (257, 23422), (259, 23428), (261, 23434), (289, 23521), (302, 23557), (303, 23563), (307, 23572), (397, 23866), (421, 23920), (422, 23923), (430, 23944), (443, 23989), (473, 24094), (497, 24178), (508, 24259), (509, 24262), (571, 24481), (589, 24529), (602, 24589), (617, 24622), (620, 24628), (634, 24700),

Gene: Madi_25 Start: 21340, Stop: 23304, Start Num: 26

Candidate Starts for Madi_25:

(Start: 26 @21340 has 7 MA's), (Start: 47 @21421 has 14 MA's), (50, 21430), (64, 21469), (66, 21472), (135, 21604), (156, 21646), (163, 21664), (Start: 190 @21742 has 1 MA's), (212, 21805), (245, 21919), (258, 21955), (271, 21994), (289, 22048), (307, 22099), (348, 22198), (369, 22273), (374, 22285), (386, 22360), (430, 22477), (431, 22480), (433, 22492), (519, 22849), (523, 22867), (534, 22924), (536, 22930), (547, 22966), (549, 22972), (607, 23158), (627, 23227), (636, 23269), (643, 23299),

Gene: Malibo_28 Start: 21996, Stop: 23735, Start Num: 77

Candidate Starts for Malibo_28:

(17, 21789), (30, 21858), (31, 21861), (40, 21885), (41, 21891), (Start: 77 @21996 has 6 MA's), (142, 22107), (159, 22134), (231, 22335), (232, 22338), (234, 22344), (238, 22356), (266, 22434), (272, 22455), (341, 22617), (369, 22710), (374, 22722), (381, 22770), (398, 22842), (408, 22860), (415, 22872), (432, 22929), (455, 22995), (477, 23079), (484, 23097), (488, 23121), (515, 23271), (528, 23325), (598, 23547), (623, 23628), (625, 23649),

Gene: Manasvini_28 Start: 22923, Stop: 24428, Start Num: 194

Candidate Starts for Manasvini_28:

(Start: 194 @22923 has 29 MA's), (218, 22992), (222, 23004), (254, 23115), (259, 23127), (261, 23133), (289, 23220), (302, 23256), (303, 23262), (307, 23271), (397, 23565), (421, 23619), (422, 23622), (430, 23643), (443, 23688), (473, 23793), (497, 23877), (508, 23958), (509, 23961), (535, 24084), (571, 24180), (589, 24228), (602, 24288), (617, 24321), (620, 24327), (634, 24399),

Gene: Mareelih_102 Start: 61923, Stop: 63602, Start Num: 77

Candidate Starts for Mareelih_102:

(Start: 68 @61905 has 11 MA's), (Start: 77 @61923 has 6 MA's), (Start: 100 @61965 has 1 MA's), (104, 61974), (142, 62040), (143, 62043), (160, 62064), (201, 62175), (218, 62217), (264, 62355), (272, 62379), (371, 62625), (397, 62742), (411, 62769), (415, 62775), (432, 62829), (444, 62868), (477, 62979), (483, 62994), (485, 63003), (518, 63174), (522, 63195), (549, 63288), (594, 63396), (636, 63573),

Gene: Maridalia_27 Start: 22923, Stop: 24428, Start Num: 194

Candidate Starts for Maridalia_27:

(Start: 194 @22923 has 29 MA's), (218, 22992), (222, 23004), (254, 23115), (259, 23127), (261, 23133), (289, 23220), (302, 23256), (303, 23262), (307, 23271), (397, 23565), (421, 23619), (422, 23622), (430, 23643), (443, 23688), (473, 23793), (497, 23877), (508, 23958), (509, 23961), (535, 24084), (571, 24180), (589, 24228), (602, 24288), (617, 24321), (620, 24327), (634, 24399),

Gene: Marteena_28 Start: 22623, Stop: 24575, Start Num: 19

Candidate Starts for Marteena_28:

(1, 22335), (2, 22392), (4, 22407), (6, 22443), (7, 22488), (8, 22491), (Start: 19 @22623 has 8 MA's), (Start: 22 @22638 has 1 MA's), (27, 22677), (28, 22680), (114, 22908), (132, 22935), (Start: 141 @22950 has 1 MA's), (232, 23184), (234, 23190), (238, 23202), (266, 23280), (272, 23301), (320, 23421), (341, 23463), (369, 23556), (374, 23568), (381, 23610), (408, 23700), (415, 23712), (432, 23769), (441, 23802), (455, 23835), (469, 23895), (477, 23919), (484, 23937), (515, 24111), (517, 24117), (528, 24165), (598, 24387), (623, 24468), (625, 24489),

Gene: Matteo_24 Start: 19369, Stop: 20961, Start Num: 146

Candidate Starts for Matteo_24:

(43, 19135), (46, 19150), (58, 19186), (74, 19231), (76, 19234), (Start: 146 @19369 has 5 MA's), (177, 19438), (187, 19453), (203, 19501), (232, 19585), (234, 19591), (243, 19612), (246, 19627), (266, 19681), (272, 19702), (277, 19714), (350, 19879), (377, 19978), (404, 20077), (408, 20089), (415, 20101), (432, 20158), (441, 20191), (444, 20197), (477, 20308), (515, 20503), (539, 20584), (547, 20614), (589, 20725), (598, 20770), (618, 20836), (625, 20872),

Gene: McKinley_40 Start: 34696, Stop: 36618, Start Num: 29

Candidate Starts for McKinley_40:

(Start: 29 @34696 has 37 MA's), (69, 34831), (Start: 73 @34840 has 1 MA's), (90, 34873), (101, 34897), (135, 34966), (Start: 149 @34996 has 1 MA's), (167, 35041), (232, 35233), (234, 35239), (243, 35260), (247, 35278), (250, 35290), (272, 35350), (292, 35404), (345, 35518), (369, 35605), (381, 35659), (397, 35725), (408, 35755), (415, 35767), (430, 35812), (432, 35824), (436, 35842), (447, 35869), (468, 35947), (477, 35974), (485, 35998), (508, 36121), (514, 36163), (539, 36247), (547,

36277), (561, 36304), (580, 36358), (592, 36388), (606, 36460), (611, 36469),

Gene: Miley16_20 Start: 19228, Stop: 21024, Start Num: 53

Candidate Starts for Miley16_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386, 20146), (406, 20203), (409, 20209), (436, 20293), (440, 20302), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (544, 20695), (556, 20722), (562, 20740), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: MinecraftSteve_34 Start: 21865, Stop: 23577, Start Num: 45

Candidate Starts for MinecraftSteve_34:

(Start: 45 @21865 has 20 MA's), (82, 21958), (155, 22108), (169, 22147), (Start: 179 @22177 has 1 MA's), (233, 22303), (234, 22306), (281, 22444), (298, 22501), (342, 22546), (359, 22552), (376, 22618), (386, 22672), (428, 22786), (432, 22804), (436, 22822), (461, 22879), (505, 23056), (536, 23215), (547, 23251), (590, 23368), (600, 23419), (621, 23479), (627, 23515), (638, 23563),

Gene: Miskis_58 Start: 35162, Stop: 36994, Start Num: 47

Candidate Starts for Miskis_58:

(Start: 47 @35162 has 14 MA's), (94, 35267), (99, 35276), (131, 35330), (172, 35420), (188, 35459), (196, 35477), (233, 35561), (255, 35630), (353, 35900), (394, 36062), (428, 36146), (430, 36152), (465, 36272), (523, 36548), (534, 36605), (536, 36611), (577, 36728), (588, 36755), (607, 36839), (627, 36908),

Gene: MkaliMitinis3_20 Start: 19228, Stop: 21024, Start Num: 53

Candidate Starts for MkaliMitinis3_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386, 20146), (406, 20203), (407, 20206), (409, 20209), (436, 20293), (440, 20302), (452, 20329), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (544, 20695), (556, 20722), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: Mocha12_25 Start: 20505, Stop: 22028, Start Num: 199

Candidate Starts for Mocha12_25:

(Start: 199 @20505 has 19 MA's), (227, 20577), (230, 20589), (238, 20616), (242, 20622), (246, 20640), (286, 20760), (288, 20769), (313, 20835), (357, 20949), (371, 20991), (377, 21021), (383, 21051), (398, 21111), (404, 21117), (415, 21141), (422, 21165), (430, 21183), (432, 21195), (436, 21213), (441, 21228), (444, 21234), (460, 21285), (467, 21312), (485, 21363), (512, 21531), (545, 21669), (554, 21690), (555, 21693), (559, 21705), (572, 21744), (612, 21891), (625, 21951), (626, 21954),

Gene: MoontowerMania_36 Start: 32904, Stop: 34625, Start Num: 92

Candidate Starts for MoontowerMania_36:

(Start: 92 @32904 has 22 MA's), (157, 33039), (162, 33048), (170, 33081), (177, 33105), (203, 33174), (216, 33204), (229, 33249), (291, 33435), (310, 33474), (312, 33483), (317, 33498), (341, 33555), (349, 33579), (371, 33651), (391, 33738), (403, 33774), (405, 33780), (421, 33822), (427, 33837), (472, 33990), (473, 33993), (484, 34020), (497, 34077), (503, 34110), (509, 34158), (522, 34224), (524, 34230), (526, 34242), (537, 34272), (540, 34278), (553, 34314), (557, 34323), (572, 34368), (611, 34497),

Gene: Moosehead_24 Start: 19352, Stop: 20872, Start Num: 199

Candidate Starts for Moosehead_24:

(Start: 199 @19352 has 19 MA's), (227, 19421), (233, 19442), (238, 19460), (242, 19466), (246, 19484), (261, 19526), (286, 19604), (288, 19613), (357, 19793), (371, 19835), (377, 19865), (383, 19895), (404, 19961), (415, 19985), (422, 20009), (430, 20027), (432, 20039), (441, 20072), (444, 20078), (460, 20129), (467, 20156), (485, 20207), (512, 20375), (521, 20414), (522, 20417), (534, 20474), (545, 20513), (554, 20534), (555, 20537), (559, 20549), (572, 20588), (612, 20735), (626, 20798),

Gene: Morkie_25 Start: 20143, Stop: 21978, Start Num: 39

Candidate Starts for Morkie_25:

(Start: 39 @20143 has 3 MA's), (91, 20287), (96, 20299), (112, 20332), (116, 20338), (Start: 130 @20362 has 5 MA's), (138, 20374), (163, 20419), (175, 20449), (178, 20455), (232, 20599), (234, 20605), (247, 20644), (250, 20656), (252, 20662), (272, 20716), (369, 20971), (371, 20974), (381, 21025), (389, 21061), (397, 21091), (400, 21097), (408, 21121), (415, 21133), (432, 21190), (436, 21208), (477, 21340), (479, 21346), (485, 21364), (515, 21532), (539, 21613), (553, 21655), (561, 21670), (589, 21751), (597, 21787), (624, 21886),

Gene: MortyNRick_28 Start: 21851, Stop: 23635, Start Num: 34

Candidate Starts for MortyNRick_28:

(Start: 34 @21851 has 21 MA's), (38, 21866), (48, 21893), (59, 21923), (91, 21995), (96, 22007), (Start: 130 @22070 has 5 MA's), (138, 22082), (161, 22124), (178, 22163), (185, 22172), (214, 22250), (232, 22307), (234, 22313), (243, 22334), (244, 22343), (250, 22364), (252, 22370), (306, 22472), (307, 22475), (325, 22505), (330, 22517), (345, 22541), (347, 22550), (369, 22616), (374, 22628), (381, 22670), (387, 22703), (397, 22736), (400, 22742), (408, 22766), (415, 22778), (432, 22835), (436, 22853), (477, 22985), (485, 23009), (488, 23027), (515, 23180), (520, 23195), (522, 23210), (524, 23216), (539, 23261), (543, 23279), (547, 23291), (549, 23297), (557, 23309), (561, 23318), (580, 23372), (598, 23441), (606, 23474), (609, 23480), (625, 23543), (626, 23546), (629, 23564), (635, 23585), (636, 23594),

Gene: Mutzi_35 Start: 28649, Stop: 30571, Start Num: 23

Candidate Starts for Mutzi_35:

(Start: 23 @28649 has 1 MA's), (51, 28772), (58, 28793), (Start: 78 @28841 has 1 MA's), (110, 28895), (127, 28916), (152, 28958), (186, 29039), (231, 29171), (232, 29174), (266, 29270), (272, 29291), (341, 29453), (369, 29546), (374, 29558), (381, 29606), (408, 29696), (415, 29708), (432, 29765), (436, 29783), (455, 29831), (477, 29915), (484, 29933), (494, 29981), (496, 29987), (515, 30107), (517, 30113), (589, 30338), (598, 30383), (623, 30464), (625, 30485),

Gene: NearlyHeadless_28 Start: 21529, Stop: 23250, Start Num: 68

Candidate Starts for NearlyHeadless_28:

(Start: 68 @21529 has 11 MA's), (147, 21673), (155, 21688), (196, 21787), (226, 21877), (235, 21913), (243, 21934), (267, 22006), (274, 22030), (290, 22084), (337, 22186), (373, 22282), (382, 22336), (393, 22384), (440, 22513), (449, 22531), (487, 22657), (528, 22861), (529, 22870), (557, 22948), (558, 22951), (593, 23047), (619, 23146), (638, 23233),

Gene: Nebulosus_33 Start: 21743, Stop: 23455, Start Num: 45

Candidate Starts for Nebulosus_33:

(Start: 45 @21743 has 20 MA's), (82, 21836), (155, 21986), (169, 22025), (Start: 179 @22055 has 1 MA's), (233, 22181), (234, 22184), (281, 22322), (298, 22379), (342, 22424), (359, 22430), (376, 22496), (386, 22550), (428, 22664), (432, 22682), (436, 22700), (461, 22757), (505, 22934), (536, 23093), (547, 23129), (590, 23246), (600, 23297), (621, 23357), (627, 23393), (638, 23441),

Gene: Nedarya_32 Start: 22359, Stop: 24071, Start Num: 45

Candidate Starts for Nedarya_32:

(Start: 45 @22359 has 20 MA's), (49, 22374), (133, 22557), (Start: 179 @22671 has 1 MA's), (188, 22695), (205, 22725), (210, 22740), (233, 22797), (234, 22800), (281, 22938), (284, 22950), (298, 22995), (342, 23040), (376, 23112), (386, 23166), (393, 23190), (428, 23280), (432, 23298), (436, 23316), (474, 23418), (480, 23424), (505, 23550), (536, 23709), (547, 23745), (549, 23751), (551, 23754), (568, 23799), (600, 23913), (618, 23967), (621, 23973), (627, 24009), (637, 24054), (638, 24057), (639, 24066),

Gene: Neobush_28 Start: 22923, Stop: 24428, Start Num: 194

Candidate Starts for Neobush_28:

(Start: 194 @22923 has 29 MA's), (218, 22992), (222, 23004), (254, 23115), (259, 23127), (261, 23133), (289, 23220), (302, 23256), (303, 23262), (307, 23271), (397, 23565), (421, 23619), (422, 23622), (430, 23643), (443, 23688), (473, 23793), (497, 23877), (508, 23958), (509, 23961), (535, 24084), (571, 24180), (589, 24228), (602, 24288), (617, 24321), (620, 24327), (634, 24399),

Gene: Nettuno_24 Start: 19408, Stop: 20961, Start Num: 153

Candidate Starts for Nettuno_24:

(Start: 153 @19408 has 3 MA's), (177, 19477), (187, 19492), (201, 19534), (203, 19540), (232, 19624), (234, 19630), (243, 19651), (247, 19669), (251, 19681), (253, 19687), (327, 19843), (351, 19885), (377, 19978), (381, 19999), (397, 20065), (408, 20095), (415, 20107), (432, 20164), (477, 20314), (485, 20338), (515, 20506), (539, 20605), (543, 20623), (547, 20635), (611, 20812), (619, 20839), (627, 20878),

Gene: Netyap_20 Start: 19228, Stop: 21024, Start Num: 53

Candidate Starts for Netyap_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386, 20146), (406, 20203), (409, 20209), (436, 20293), (440, 20302), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (544, 20695), (556, 20722), (562, 20740), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: Neville_30 Start: 25504, Stop: 27090, Start Num: 98

Candidate Starts for Neville_30:

(Start: 98 @25504 has 9 MA's), (115, 25540), (186, 25684), (195, 25705), (196, 25708), (197, 25711), (204, 25735), (217, 25765), (219, 25768), (231, 25810), (232, 25813), (243, 25840), (244, 25849), (250, 25870), (252, 25876), (271, 25927), (272, 25930), (300, 25951), (315, 25993), (340, 26014), (341, 26017), (350, 26029), (369, 26095), (381, 26149), (389, 26185), (415, 26248), (423, 26272), (430, 26290), (432, 26302), (436, 26320), (441, 26335), (477, 26452), (479, 26458), (485, 26476), (487, 26482), (488, 26494), (495, 26521), (510, 26620), (515, 26644), (520, 26659), (530, 26698), (539, 26725), (541, 26731), (543, 26743), (547, 26755), (549, 26761), (564, 26797), (582, 26851), (619, 26980), (624, 27007), (633, 27040),

Gene: Nicholasp3_20 Start: 19233, Stop: 21029, Start Num: 53

Candidate Starts for Nicholasp3_20:

(Start: 52 @19230 has 5 MA's), (Start: 53 @19233 has 23 MA's), (121, 19386), (136, 19410), (172, 19506), (176, 19515), (193, 19557), (195, 19560), (203, 19590), (214, 19617), (241, 19710), (248, 19734), (278, 19818), (290, 19863), (305, 19899), (354, 20019), (362, 20037), (366, 20052), (372, 20070), (373, 20073), (386, 20151), (406, 20208), (407, 20211), (409, 20214), (436, 20298), (440, 20307), (452, 20334), (486, 20445), (487, 20448), (520, 20616), (538, 20691), (544, 20700), (556, 20727), (567, 20760), (573, 20775), (578, 20790), (581, 20796), (600, 20874), (601, 20877), (618, 20925), (637, 21012),

Gene: Nordenberg_32 Start: 32866, Stop: 34788, Start Num: 29

Candidate Starts for Nordenberg_32:

(Start: 29 @32866 has 37 MA's), (69, 33001), (Start: 73 @33010 has 1 MA's), (90, 33043), (101, 33067), (135, 33136), (167, 33211), (232, 33403), (234, 33409), (243, 33430), (247, 33448), (250, 33460), (272, 33520), (292, 33574), (345, 33688), (369, 33775), (381, 33829), (397, 33895), (408, 33925), (415, 33937), (430, 33982), (432, 33994), (436, 34012), (447, 34039), (468, 34117), (477, 34144), (485, 34168), (508, 34291), (514, 34333), (539, 34417), (547, 34447), (561, 34474), (580, 34528), (592, 34558), (606, 34630), (611, 34639),

Gene: Norvs_57 Start: 35401, Stop: 37233, Start Num: 47

Candidate Starts for Norvs_57:

(Start: 47 @35401 has 14 MA's), (94, 35506), (99, 35515), (131, 35569), (172, 35659), (188, 35698), (196, 35716), (233, 35800), (255, 35869), (353, 36139), (394, 36301), (428, 36385), (430, 36391), (465, 36511), (523, 36787), (534, 36844), (536, 36850), (577, 36967), (588, 36994), (607, 37078), (627, 37147),

Gene: Nubi_33 Start: 28222, Stop: 30144, Start Num: 29

Candidate Starts for Nubi_33:

(Start: 29 @28222 has 37 MA's), (63, 28345), (72, 28366), (95, 28414), (Start: 149 @28522 has 1 MA's), (160, 28543), (192, 28624), (203, 28660), (205, 28663), (231, 28741), (232, 28744), (234, 28750), (243, 28771), (250, 28801), (252, 28807), (304, 28942), (339, 29029), (344, 29038), (346, 29044), (348, 29050), (369, 29125), (377, 29158), (381, 29179), (400, 29251), (408, 29275), (415, 29287), (432, 29344), (477, 29494), (485, 29518), (515, 29686), (520, 29701), (547, 29797), (589, 29908), (597, 29944),

Gene: Nymphadora_26 Start: 22926, Stop: 24431, Start Num: 194

Candidate Starts for Nymphadora_26:

(60, 22611), (108, 22719), (144, 22788), (Start: 146 @22791 has 5 MA's), (158, 22815), (161, 22821), (Start: 194 @22926 has 29 MA's), (218, 22995), (222, 23007), (254, 23118), (257, 23124), (259, 23130), (261, 23136), (289, 23223), (302, 23259), (303, 23265), (307, 23274), (397, 23568), (421, 23622), (422, 23625), (430, 23646), (443, 23691), (473, 23796), (497, 23880), (508, 23961), (509, 23964), (571, 24183), (589, 24231), (602, 24291), (617, 24324), (620, 24330), (634, 24402),

Gene: ODay_33 Start: 23997, Stop: 25781, Start Num: 34

Candidate Starts for ODay_33:

(Start: 34 @23997 has 21 MA's), (59, 24069), (91, 24141), (96, 24153), (120, 24198), (138, 24228), (161, 24270), (163, 24273), (178, 24309), (185, 24318), (192, 24333), (196, 24342), (214, 24396), (226, 24432), (232, 24453), (234, 24459), (243, 24480), (244, 24489), (250, 24510), (252, 24516), (306, 24618), (307, 24621), (325, 24651), (330, 24663), (345, 24687), (369, 24762), (374, 24774), (381, 24816), (387, 24849), (397, 24882), (400, 24888), (408, 24912), (415, 24924), (432, 24981), (436, 24999), (477, 25131), (485, 25155), (488, 25173), (515, 25326), (520, 25341), (522, 25356), (524, 25362), (539, 25407), (543, 25425), (547, 25437), (549, 25443), (557, 25455), (561, 25464), (580, 25518), (589, 25542), (598, 25587), (606, 25620), (609, 25626), (625, 25689), (626, 25692), (629, 25710), (635, 25731), (636, 25740),

Gene: Ohgeesy_26 Start: 22549, Stop: 24054, Start Num: 194

Candidate Starts for Ohgeesy_26:

(60, 22234), (108, 22342), (144, 22411), (Start: 146 @22414 has 5 MA's), (158, 22438), (161, 22444), (Start: 194 @22549 has 29 MA's), (218, 22618), (222, 22630), (254, 22741), (257, 22747), (259, 22753), (261, 22759), (289, 22846), (302, 22882), (303, 22888), (307, 22897), (397, 23191), (421, 23245), (422, 23248), (430, 23269), (443, 23314), (473, 23419), (497, 23503), (508, 23584), (509, 23587), (571, 23806), (589, 23854), (602, 23914), (617, 23947), (620, 23953), (634, 24025),

Gene: OneDirection_23 Start: 19380, Stop: 20984, Start Num: 146

Candidate Starts for OneDirection_23:

(Start: 146 @19380 has 5 MA's), (177, 19449), (187, 19464), (203, 19512), (234, 19602), (243, 19623), (247, 19641), (266, 19692), (272, 19713), (277, 19725), (350, 19911), (369, 19977), (371, 19980), (377, 20010), (404, 20109), (408, 20121), (415, 20133), (432, 20190), (444, 20229), (477, 20340), (490, 20391), (492, 20397), (515, 20532), (524, 20568), (539, 20613), (547, 20643), (549, 20649), (580, 20724), (589, 20748), (598, 20793), (606, 20826), (611, 20835), (626, 20898),

Gene: OneUp_50 Start: 32790, Stop: 34595, Start Num: 47

Candidate Starts for OneUp_50:

(Start: 47 @32790 has 14 MA's), (133, 32961), (172, 33048), (196, 33105), (201, 33108), (233, 33189), (294, 33378), (296, 33381), (353, 33531), (365, 33567), (369, 33579), (386, 33666), (392, 33678), (401, 33708), (408, 33723), (424, 33759), (428, 33771), (431, 33780), (436, 33807), (437, 33810), (438, 33813), (461, 33876), (464, 33894), (523, 34167), (526, 34182), (539, 34236), (577, 34341), (580, 34350), (584, 34359),

Gene: Oofda_34 Start: 21717, Stop: 23429, Start Num: 45

Candidate Starts for Oofda_34:

(Start: 45 @21717 has 20 MA's), (82, 21810), (155, 21960), (169, 21999), (Start: 179 @22029 has 1 MA's), (233, 22155), (234, 22158), (281, 22296), (298, 22353), (342, 22398), (359, 22404), (376, 22470), (386, 22524), (428, 22638), (432, 22656), (436, 22674), (461, 22731), (505, 22908), (536, 23067), (547, 23103), (590, 23220), (600, 23271), (621, 23331), (627, 23367), (638, 23415),

Gene: Orchid_27 Start: 31352, Stop: 33037, Start Num: 130

Candidate Starts for Orchid_27:

(Start: 130 @31352 has 5 MA's), (162, 31415), (173, 31460), (184, 31496), (197, 31526), (280, 31775), (311, 31868), (338, 31937), (355, 31994), (357, 32000), (364, 32021), (369, 32039), (383, 32102), (462, 32330), (485, 32411), (498, 32477), (513, 32588), (536, 32681), (542, 32702), (611, 32900), (622, 32933),

Gene: PP_40 Start: 28396, Stop: 30327, Start Num: 18

Candidate Starts for PP_40:

(Start: 18 @28396 has 2 MA's), (25, 28447), (44, 28516), (50, 28543), (64, 28585), (80, 28618), (103, 28666), (Start: 149 @28756 has 1 MA's), (154, 28765), (165, 28792), (172, 28813), (201, 28864), (209, 28885), (219, 28906), (220, 28909), (243, 28972), (263, 29038), (290, 29122), (358, 29281), (366, 29305), (374, 29326), (378, 29359), (386, 29398), (390, 29407), (449, 29569), (454, 29581), (456, 29593), (486, 29689), (528, 29893), (545, 29956), (550, 29971), (569, 30022), (578, 30043), (596, 30091), (619, 30178), (629, 30232), (631, 30238), (635, 30265),

Gene: PantheRoc_27 Start: 22121, Stop: 23626, Start Num: 194

Candidate Starts for PantheRoc_27:

(108, 21914), (144, 21983), (Start: 146 @21986 has 5 MA's), (158, 22010), (161, 22016), (Start: 194 @22121 has 29 MA's), (218, 22190), (222, 22202), (254, 22313), (259, 22325), (261, 22331), (289, 22418), (302, 22454), (303, 22460), (307, 22469), (397, 22763), (421, 22817), (422, 22820), (430, 22841), (443, 22886), (473, 22991), (497, 23075), (508, 23156), (509, 23159), (571, 23378), (589, 23426), (602, 23486), (617, 23519), (620, 23525), (634, 23597),

Gene: Paries_40 Start: 34332, Stop: 36257, Start Num: 29

Candidate Starts for Paries_40:

(Start: 29 @34332 has 37 MA's), (69, 34467), (Start: 73 @34476 has 1 MA's), (90, 34509), (101, 34533), (135, 34602), (167, 34677), (232, 34869), (234, 34875), (243, 34896), (247, 34914), (250, 34926), (272, 34986), (292, 35040), (345, 35157), (369, 35244), (381, 35298), (393, 35352), (397, 35364), (408, 35394), (415, 35406), (430, 35451), (432, 35463), (436, 35481), (447, 35508), (468, 35586), (477, 35613), (485, 35637), (508, 35760), (514, 35802), (539, 35886), (547, 35916), (561,

35943), (580, 35997), (592, 36027), (606, 36099), (611, 36108),

Gene: PatrickStar_27 Start: 31352, Stop: 33037, Start Num: 130

Candidate Starts for PatrickStar_27:

(Start: 130 @31352 has 5 MA's), (162, 31415), (173, 31460), (184, 31496), (197, 31526), (280, 31775), (311, 31868), (338, 31937), (355, 31994), (357, 32000), (364, 32021), (369, 32039), (383, 32102), (462, 32330), (485, 32411), (498, 32477), (513, 32588), (536, 32681), (542, 32702), (611, 32900), (622, 32933),

Gene: Pepperoni_25 Start: 20244, Stop: 21851, Start Num: 146

Candidate Starts for Pepperoni_25:

(43, 20010), (46, 20025), (58, 20061), (74, 20106), (76, 20109), (Start: 146 @20244 has 5 MA's), (186, 20331), (232, 20463), (234, 20469), (243, 20490), (247, 20508), (266, 20559), (272, 20580), (277, 20592), (350, 20778), (369, 20844), (371, 20847), (377, 20877), (404, 20976), (408, 20988), (415, 21000), (432, 21057), (444, 21096), (477, 21207), (490, 21258), (492, 21264), (515, 21399), (524, 21435), (539, 21480), (547, 21510), (549, 21516), (580, 21591), (589, 21615), (593, 21624), (598, 21660), (606, 21693), (611, 21702), (626, 21765),

Gene: Periwinkle_31 Start: 22588, Stop: 24423, Start Num: 34

Candidate Starts for Periwinkle_31:

(Start: 34 @22588 has 21 MA's), (90, 22750), (103, 22780), (129, 22834), (138, 22849), (143, 22861), (145, 22864), (152, 22879), (154, 22882), (155, 22885), (192, 22975), (196, 22984), (197, 22987), (226, 23074), (232, 23095), (234, 23101), (243, 23122), (244, 23131), (250, 23152), (252, 23158), (306, 23260), (307, 23263), (325, 23293), (330, 23305), (345, 23329), (347, 23338), (369, 23404), (374, 23416), (381, 23458), (387, 23491), (397, 23524), (400, 23530), (408, 23554), (415, 23566), (432, 23623), (436, 23641), (477, 23773), (485, 23797), (488, 23815), (515, 23968), (520, 23983), (522, 23998), (524, 24004), (539, 24049), (543, 24067), (547, 24079), (549, 24085), (557, 24097), (561, 24106), (580, 24160), (598, 24229), (606, 24262), (609, 24268), (625, 24331), (626, 24334), (629, 24352), (635, 24373), (636, 24382),

Gene: Phabuloso_28 Start: 21875, Stop: 23710, Start Num: 34

Candidate Starts for Phabuloso_28:

(Start: 34 @21875 has 21 MA's), (90, 22037), (103, 22067), (129, 22121), (138, 22136), (143, 22148), (145, 22151), (152, 22166), (154, 22169), (155, 22172), (192, 22262), (196, 22271), (197, 22274), (226, 22361), (232, 22382), (234, 22388), (243, 22409), (244, 22418), (250, 22439), (252, 22445), (306, 22547), (307, 22550), (325, 22580), (330, 22592), (345, 22616), (369, 22691), (374, 22703), (381, 22745), (387, 22778), (397, 22811), (400, 22817), (408, 22841), (415, 22853), (432, 22910), (436, 22928), (477, 23060), (485, 23084), (488, 23102), (515, 23255), (520, 23270), (522, 23285), (524, 23291), (539, 23336), (543, 23354), (547, 23366), (549, 23372), (557, 23384), (561, 23393), (580, 23447), (598, 23516), (606, 23549), (609, 23555), (625, 23618), (626, 23621), (629, 23639), (635, 23660), (636, 23669),

Gene: Phendrix_89 Start: 54539, Stop: 56233, Start Num: 77

Candidate Starts for Phendrix_89:

(Start: 77 @54539 has 6 MA's), (85, 54557), (89, 54563), (139, 54653), (142, 54659), (143, 54662), (160, 54683), (218, 54836), (220, 54839), (231, 54878), (264, 54974), (266, 54977), (277, 55010), (318, 55115), (348, 55166), (369, 55241), (381, 55295), (389, 55331), (405, 55373), (411, 55388), (477, 55598), (485, 55622), (508, 55754), (522, 55826), (526, 55844), (548, 55916), (563, 55949), (565, 55955), (570, 55973),

Gene: Phillis_28 Start: 21576, Stop: 23297, Start Num: 68

Candidate Starts for Phillis_28:

(Start: 68 @21576 has 11 MA's), (143, 21711), (147, 21720), (155, 21735), (196, 21834), (226, 21924), (235, 21960), (243, 21981), (267, 22053), (274, 22077), (290, 22131), (298, 22149), (305, 22167), (337, 22233), (373, 22329), (382, 22383), (434, 22542), (449, 22578), (487, 22704), (528, 22908), (529, 22917), (558, 22998), (593, 23094), (619, 23193),

Gene: PhinkBoden_56 Start: 35782, Stop: 37614, Start Num: 47

Candidate Starts for PhinkBoden_56:

(Start: 47 @35782 has 14 MA's), (94, 35887), (99, 35896), (131, 35950), (172, 36040), (188, 36079), (196, 36097), (233, 36181), (255, 36250), (353, 36520), (394, 36682), (428, 36766), (430, 36772), (465, 36892), (523, 37168), (534, 37225), (536, 37231), (577, 37348), (588, 37375), (607, 37459), (627, 37528),

Gene: Phistory_30 Start: 22909, Stop: 24744, Start Num: 34

Candidate Starts for Phistory_30:

(Start: 34 @22909 has 21 MA's), (90, 23071), (103, 23101), (129, 23155), (138, 23170), (143, 23182), (145, 23185), (152, 23200), (154, 23203), (155, 23206), (192, 23296), (196, 23305), (197, 23308), (226, 23395), (232, 23416), (234, 23422), (243, 23443), (244, 23452), (250, 23473), (252, 23479), (306, 23581), (307, 23584), (325, 23614), (330, 23626), (345, 23650), (347, 23659), (369, 23725), (374, 23737), (381, 23779), (387, 23812), (397, 23845), (400, 23851), (408, 23875), (415, 23887), (432, 23944), (436, 23962), (477, 24094), (485, 24118), (488, 24136), (515, 24289), (520, 24304), (522, 24319), (524, 24325), (539, 24370), (543, 24388), (547, 24400), (549, 24406), (557, 24418), (561, 24427), (580, 24481), (598, 24550), (606, 24583), (609, 24589), (625, 24652), (626, 24655), (629, 24673), (635, 24694), (636, 24703),

Gene: Phlop_33 Start: 28304, Stop: 30226, Start Num: 29

Candidate Starts for Phlop_33:

(Start: 29 @28304 has 37 MA's), (63, 28427), (72, 28448), (95, 28496), (Start: 149 @28604 has 1 MA's), (160, 28625), (192, 28706), (203, 28742), (205, 28745), (231, 28823), (232, 28826), (234, 28832), (243, 28853), (250, 28883), (252, 28889), (304, 29024), (339, 29111), (344, 29120), (346, 29126), (348, 29132), (369, 29207), (377, 29240), (381, 29261), (400, 29333), (408, 29357), (415, 29369), (432, 29426), (477, 29576), (485, 29600), (515, 29768), (520, 29783), (547, 29879), (589, 29990), (597, 30026),

Gene: PhorbesPhlower_25 Start: 20143, Stop: 21978, Start Num: 39

Candidate Starts for PhorbesPhlower_25:

(Start: 39 @20143 has 3 MA's), (91, 20287), (96, 20299), (112, 20332), (116, 20338), (Start: 130 @20362 has 5 MA's), (138, 20374), (163, 20419), (175, 20449), (178, 20455), (232, 20599), (234, 20605), (247, 20644), (250, 20656), (252, 20662), (272, 20716), (369, 20971), (371, 20974), (381, 21025), (389, 21061), (397, 21091), (400, 21097), (408, 21121), (415, 21133), (432, 21190), (436, 21208), (477, 21340), (479, 21346), (485, 21364), (515, 21532), (539, 21613), (553, 21655), (561, 21670), (589, 21751), (597, 21787), (624, 21886),

Gene: Pickett_24 Start: 19332, Stop: 20870, Start Num: 149

Candidate Starts for Pickett_24:

(Start: 149 @19332 has 1 MA's), (177, 19401), (187, 19416), (189, 19422), (203, 19464), (234, 19554), (243, 19575), (250, 19605), (306, 19713), (307, 19716), (325, 19746), (330, 19758), (351, 19797), (374, 19869), (377, 19890), (381, 19911), (408, 20007), (415, 20019), (432, 20076), (436, 20094), (438, 20100), (451, 20133), (477, 20226), (485, 20250), (514, 20415), (515, 20418), (598, 20679), (635, 20823),

Gene: Pollux_28 Start: 22623, Stop: 24575, Start Num: 19

Candidate Starts for Pollux_28:

(1, 22335), (2, 22392), (4, 22407), (6, 22443), (7, 22488), (8, 22491), (Start: 19 @22623 has 8 MA's), (Start: 22 @22638 has 1 MA's), (27, 22677), (28, 22680), (114, 22908), (132, 22935), (Start: 141 @22950 has 1 MA's), (232, 23184), (234, 23190), (238, 23202), (266, 23280), (272, 23301), (320, 23421), (341, 23463), (369, 23556), (374, 23568), (381, 23610), (408, 23700), (415, 23712), (432, 23769), (441, 23802), (455, 23835), (469, 23895), (477, 23919), (484, 23937), (515, 24111), (517, 24117), (528, 24165), (598, 24387), (623, 24468), (625, 24489),

Gene: Polly_25 Start: 22366, Stop: 23871, Start Num: 194

Candidate Starts for Polly_25:

(Start: 194 @22366 has 29 MA's), (218, 22435), (222, 22447), (254, 22558), (259, 22570), (261, 22576), (289, 22663), (302, 22699), (303, 22705), (307, 22714), (397, 23008), (421, 23062), (422, 23065), (430, 23086), (443, 23131), (473, 23236), (497, 23320), (508, 23401), (509, 23404), (535, 23527), (571, 23623), (589, 23671), (602, 23731), (617, 23764), (620, 23770), (634, 23842),

Gene: Powerball_24 Start: 20546, Stop: 22255, Start Num: 98

Candidate Starts for Powerball_24:

(Start: 98 @20546 has 9 MA's), (119, 20594), (125, 20603), (186, 20729), (189, 20738), (192, 20744), (197, 20756), (200, 20762), (203, 20780), (205, 20783), (231, 20861), (232, 20864), (234, 20870), (243, 20891), (247, 20909), (250, 20921), (275, 20987), (279, 21002), (297, 21059), (318, 21113), (322, 21119), (346, 21170), (348, 21176), (350, 21185), (360, 21221), (369, 21251), (371, 21254), (381, 21305), (391, 21341), (393, 21359), (408, 21392), (410, 21395), (430, 21449), (432, 21461), (436, 21479), (477, 21611), (485, 21635), (503, 21716), (514, 21800), (515, 21803), (520, 21818), (521, 21830), (522, 21833), (526, 21851), (547, 21914), (549, 21920), (589, 22022), (622, 22136), (625, 22163),

Gene: PullumCavea_33 Start: 28304, Stop: 30226, Start Num: 29

Candidate Starts for PullumCavea_33:

(Start: 29 @28304 has 37 MA's), (63, 28427), (72, 28448), (95, 28496), (Start: 149 @28604 has 1 MA's), (160, 28625), (192, 28706), (203, 28742), (205, 28745), (231, 28823), (232, 28826), (234, 28832), (243, 28853), (250, 28883), (252, 28889), (304, 29024), (339, 29111), (344, 29120), (346, 29126), (348, 29132), (369, 29207), (377, 29240), (381, 29261), (400, 29333), (408, 29357), (415, 29369), (432, 29426), (477, 29576), (485, 29600), (515, 29768), (520, 29783), (547, 29879), (589, 29990), (597, 30026),

Gene: Rabbitrun_32 Start: 25825, Stop: 27402, Start Num: 102

Candidate Starts for Rabbitrun_32:

(Start: 98 @25816 has 9 MA's), (Start: 102 @25825 has 1 MA's), (111, 25846), (128, 25873), (195, 26017), (196, 26020), (204, 26044), (231, 26119), (232, 26122), (243, 26149), (250, 26179), (252, 26185), (266, 26218), (271, 26236), (300, 26266), (329, 26314), (330, 26317), (340, 26332), (343, 26338), (360, 26383), (371, 26416), (383, 26476), (389, 26503), (413, 26563), (415, 26566), (430, 26608), (432, 26620), (437, 26641), (438, 26644), (441, 26653), (451, 26677), (477, 26770), (479, 26776), (487, 26800), (488, 26812), (491, 26824), (508, 26917), (510, 26938), (515, 26962), (520, 26977), (524, 26998), (530, 27016), (539, 27043), (541, 27049), (543, 27061), (549, 27079), (566, 27124), (579, 27163), (594, 27196), (602, 27244), (614, 27277), (619, 27295), (626, 27331), (635, 27367), (640, 27391),

Gene: ReMo_33 Start: 21743, Stop: 23455, Start Num: 45

Candidate Starts for ReMo_33:

(Start: 45 @21743 has 20 MA's), (82, 21836), (155, 21986), (169, 22025), (Start: 179 @22055 has 1 MA's), (233, 22181), (234, 22184), (281, 22322), (298, 22379), (342, 22424), (359, 22430), (376, 22496), (386, 22550), (432, 22682), (436, 22700), (461, 22757), (505, 22934), (536, 23093), (547, 23129), (590, 23246), (600, 23297), (621, 23357), (627, 23393), (638, 23441),

Gene: Remus_33 Start: 21707, Stop: 23419, Start Num: 45

Candidate Starts for Remus_33:

(Start: 45 @21707 has 20 MA's), (82, 21800), (155, 21950), (169, 21989), (Start: 179 @22019 has 1 MA's), (233, 22145), (234, 22148), (281, 22286), (298, 22343), (342, 22388), (359, 22394), (376, 22460), (386, 22514), (428, 22628), (432, 22646), (436, 22664), (461, 22721), (505, 22898), (536, 23057), (547, 23093), (590, 23210), (600, 23261), (621, 23321), (627, 23357), (638, 23405),

Gene: Reyja_26 Start: 19864, Stop: 21561, Start Num: 86

Candidate Starts for Reyja_26:

(Start: 86 @19864 has 1 MA's), (142, 19963), (186, 20059), (192, 20074), (232, 20194), (234, 20200), (243, 20221), (253, 20257), (266, 20290), (272, 20311), (290, 20359), (322, 20428), (343, 20464), (345, 20467), (369, 20548), (381, 20602), (404, 20683), (408, 20695), (415, 20707), (427, 20743), (432, 20764), (436, 20782), (441, 20797), (477, 20914), (485, 20938), (515, 21109), (543, 21226), (547, 21238), (549, 21244), (561, 21265), (609, 21412), (619, 21442), (627, 21481),

Gene: Ribeye_37 Start: 33113, Stop: 34834, Start Num: 92

Candidate Starts for Ribeye_37:

(Start: 92 @33113 has 22 MA's), (151, 33236), (157, 33248), (177, 33314), (203, 33383), (219, 33419), (291, 33644), (310, 33683), (333, 33743), (349, 33788), (367, 33848), (403, 33983), (405, 33989), (421, 34031), (427, 34046), (435, 34082), (446, 34103), (473, 34202), (497, 34286), (503, 34319), (508, 34364), (509, 34367), (515, 34403), (524, 34439), (526, 34451), (540, 34487), (553, 34523), (572, 34577),

Gene: RiverRaider_37 Start: 31407, Stop: 33125, Start Num: 92

Candidate Starts for RiverRaider_37:

(Start: 92 @31407 has 22 MA's), (157, 31542), (177, 31608), (203, 31677), (219, 31713), (229, 31752), (268, 31866), (291, 31938), (310, 31977), (312, 31986), (338, 32052), (341, 32058), (397, 32271), (403, 32277), (405, 32283), (421, 32325), (427, 32340), (430, 32349), (473, 32493), (484, 32520), (497, 32577), (506, 32634), (508, 32655), (515, 32694), (524, 32730), (526, 32742), (531, 32757), (537, 32772), (572, 32868),

Gene: Roary_28 Start: 21475, Stop: 23196, Start Num: 68

Candidate Starts for Roary_28:

(Start: 68 @21475 has 11 MA's), (147, 21619), (155, 21634), (196, 21733), (235, 21859), (243, 21880), (267, 21952), (274, 21976), (290, 22030), (337, 22132), (373, 22228), (382, 22282), (393, 22330), (449, 22477), (487, 22603), (528, 22807), (529, 22816), (558, 22897), (593, 22993), (619, 23092), (638, 23179),

Gene: RobinSparkles_30 Start: 32266, Stop: 33954, Start Num: 130

Candidate Starts for RobinSparkles_30:

(Start: 130 @32266 has 5 MA's), (162, 32329), (184, 32410), (197, 32440), (301, 32755), (355, 32911), (357, 32917), (364, 32938), (369, 32956), (383, 33019), (462, 33247), (481, 33316), (485, 33328), (498, 33394), (513, 33505), (536, 33598), (542, 33619), (611, 33817), (622, 33850),

Gene: Rofo_38 Start: 33730, Stop: 35583, Start Num: 29

Candidate Starts for Rofo_38:

(Start: 29 @33730 has 37 MA's), (69, 33865), (Start: 73 @33874 has 1 MA's), (90, 33907), (101, 33931), (135, 34000), (Start: 149 @34030 has 1 MA's), (167, 34075), (232, 34267), (234, 34273), (243, 34294), (247, 34312), (250, 34324), (272, 34384), (319, 34450), (369, 34570), (377, 34603), (397, 34690), (408, 34720), (415, 34732), (430, 34777), (432, 34789), (436, 34807), (441, 34822), (451, 34846), (468, 34912), (477, 34939), (485, 34963), (508, 35086), (514, 35128), (539, 35212), (547, 35242), (561, 35269), (580, 35323), (592, 35353), (606, 35425), (611, 35434),

Gene: Rosalind_33 Start: 21865, Stop: 23577, Start Num: 45

Candidate Starts for Rosalind_33:

(Start: 45 @21865 has 20 MA's), (82, 21958), (155, 22108), (169, 22147), (Start: 179 @22177 has 1 MA's), (233, 22303), (234, 22306), (281, 22444), (298, 22501), (342, 22546), (359, 22552), (376, 22618), (386, 22672), (428, 22786), (432, 22804), (436, 22822), (461, 22879), (505, 23056), (536, 23215), (547, 23251), (590, 23368), (600, 23419), (621, 23479), (627, 23515), (638, 23563),

Gene: Rumpelstiltskin_20 Start: 19231, Stop: 21030, Start Num: 52

Candidate Starts for Rumpelstiltskin_20:

(Start: 52 @19231 has 5 MA's), (Start: 53 @19234 has 23 MA's), (121, 19387), (136, 19411), (172, 19507), (176, 19516), (195, 19561), (203, 19591), (214, 19618), (241, 19711), (248, 19735), (278, 19819), (290, 19864), (354, 20020), (362, 20038), (366, 20053), (372, 20071), (373, 20074), (386, 20152), (406, 20209), (407, 20212), (409, 20215), (436, 20299), (440, 20308), (452, 20335), (486, 20446), (487, 20449), (520, 20617), (538, 20692), (544, 20701), (556, 20728), (567, 20761), (573, 20776), (578, 20791), (581, 20797), (600, 20875), (601, 20878), (618, 20926), (637, 21013),

Gene: Sahara_24 Start: 20177, Stop: 21700, Start Num: 199

Candidate Starts for Sahara_24:

(Start: 199 @20177 has 19 MA's), (227, 20249), (230, 20261), (238, 20288), (246, 20312), (286, 20432), (288, 20441), (313, 20507), (357, 20621), (371, 20663), (377, 20693), (383, 20723), (404, 20789), (415, 20813), (422, 20837), (430, 20855), (432, 20867), (436, 20885), (441, 20900), (444, 20906), (460, 20957), (467, 20984), (485, 21035), (512, 21203), (545, 21341), (554, 21362), (555, 21365), (559, 21377), (572, 21416), (612, 21563), (625, 21623), (626, 21626),

Gene: Saintus_28 Start: 21494, Stop: 23215, Start Num: 68

Candidate Starts for Saintus_28:

(Start: 68 @21494 has 11 MA's), (147, 21638), (155, 21653), (196, 21752), (226, 21842), (235, 21878), (243, 21899), (267, 21971), (274, 21995), (290, 22049), (337, 22151), (373, 22247), (382, 22301), (393, 22349), (440, 22478), (449, 22496), (487, 22622), (528, 22826), (529, 22835), (558, 22916), (593, 23012), (619, 23111), (638, 23198),

Gene: Salvador_33 Start: 28218, Stop: 30140, Start Num: 29

Candidate Starts for Salvador_33:

(Start: 29 @28218 has 37 MA's), (63, 28341), (72, 28362), (95, 28410), (Start: 149 @28518 has 1 MA's), (160, 28539), (192, 28620), (203, 28656), (205, 28659), (231, 28737), (232, 28740), (234, 28746), (243, 28767), (250, 28797), (252, 28803), (304, 28938), (339, 29025), (344, 29034), (346, 29040), (348, 29046), (377, 29154), (381, 29175), (400, 29247), (408, 29271), (415, 29283), (432, 29340), (477, 29490), (485, 29514), (515, 29682), (520, 29697), (547, 29793), (589, 29904), (597, 29940),

Gene: Sanjuju_35 Start: 33293, Stop: 35014, Start Num: 92

Candidate Starts for Sanjuju_35:

(Start: 92 @33293 has 22 MA's), (157, 33428), (162, 33437), (170, 33470), (177, 33494), (203, 33563), (229, 33638), (291, 33824), (310, 33863), (312, 33872), (341, 33944), (349, 33968), (371, 34040), (391, 34127), (403, 34163), (405, 34169), (421, 34211), (427, 34226), (430, 34235), (473, 34382), (497, 34466), (503, 34499), (509, 34547), (522, 34613), (524, 34619), (526, 34631), (537, 34661), (540, 34667), (553, 34703), (557, 34712), (572, 34757),

Gene: Santhid_25 Start: 19699, Stop: 21399, Start Num: 87

Candidate Starts for Santhid_25:

(Start: 87 @19699 has 3 MA's), (142, 19798), (186, 19894), (192, 19909), (195, 19915), (231, 20026), (232, 20029), (234, 20035), (243, 20056), (247, 20074), (253, 20092), (266, 20125), (272, 20146), (290, 20194), (322, 20263), (343, 20299), (345, 20302), (369, 20383), (374, 20395), (381, 20437),

(404, 20518), (405, 20521), (408, 20530), (415, 20542), (427, 20578), (432, 20599), (436, 20617), (441, 20632), (477, 20749), (485, 20773), (515, 20944), (539, 21043), (543, 21061), (547, 21073), (549, 21079), (561, 21100), (619, 21277), (627, 21316),

Gene: Saronaya_36 Start: 31956, Stop: 33677, Start Num: 92

Candidate Starts for Saronaya_36:

(Start: 92 @31956 has 22 MA's), (151, 32079), (157, 32091), (177, 32157), (203, 32226), (219, 32262), (229, 32301), (291, 32487), (310, 32526), (333, 32586), (349, 32631), (367, 32691), (403, 32826), (405, 32832), (421, 32874), (427, 32889), (435, 32925), (446, 32946), (473, 33045), (497, 33129), (503, 33162), (508, 33207), (509, 33210), (515, 33246), (524, 33282), (526, 33294), (540, 33330), (553, 33366), (572, 33420),

Gene: Sarshaun_20 Start: 19261, Stop: 21057, Start Num: 53

Candidate Starts for Sarshaun_20:

(Start: 52 @19258 has 5 MA's), (Start: 53 @19261 has 23 MA's), (121, 19414), (136, 19438), (172, 19534), (176, 19543), (193, 19585), (195, 19588), (203, 19618), (214, 19645), (241, 19738), (248, 19762), (278, 19846), (290, 19891), (305, 19927), (354, 20047), (362, 20065), (366, 20080), (372, 20098), (373, 20101), (386, 20179), (406, 20236), (407, 20239), (409, 20242), (436, 20326), (440, 20335), (452, 20362), (486, 20473), (487, 20476), (520, 20644), (538, 20719), (544, 20728), (556, 20755), (567, 20788), (573, 20803), (578, 20818), (581, 20824), (600, 20902), (601, 20905), (637, 21040),

Gene: Savage_25 Start: 20505, Stop: 22028, Start Num: 199

Candidate Starts for Savage_25:

(Start: 199 @20505 has 19 MA's), (227, 20577), (230, 20589), (238, 20616), (242, 20622), (246, 20640), (286, 20760), (288, 20769), (313, 20835), (357, 20949), (371, 20991), (377, 21021), (383, 21051), (398, 21111), (404, 21117), (415, 21141), (422, 21165), (430, 21183), (432, 21195), (436, 21213), (441, 21228), (444, 21234), (460, 21285), (467, 21312), (485, 21363), (512, 21531), (545, 21669), (554, 21690), (555, 21693), (559, 21705), (572, 21744), (612, 21891), (625, 21951), (626, 21954),

Gene: Savbucketdawg_33 Start: 27999, Stop: 29921, Start Num: 29

Candidate Starts for Savbucketdawg_33:

(Start: 29 @27999 has 37 MA's), (63, 28122), (72, 28143), (95, 28191), (Start: 149 @28299 has 1 MA's), (160, 28320), (192, 28401), (203, 28437), (205, 28440), (231, 28518), (232, 28521), (234, 28527), (243, 28548), (250, 28578), (252, 28584), (304, 28719), (339, 28806), (344, 28815), (346, 28821), (348, 28827), (369, 28902), (377, 28935), (381, 28956), (400, 29028), (408, 29052), (415, 29064), (432, 29121), (477, 29271), (485, 29295), (515, 29463), (520, 29478), (547, 29574), (589, 29685), (597, 29721),

Gene: Schmidt_27 Start: 20153, Stop: 21607, Start Num: 190

Candidate Starts for Schmidt_27:

(Start: 190 @20153 has 1 MA's), (196, 20165), (215, 20222), (222, 20240), (238, 20294), (261, 20360), (263, 20369), (283, 20420), (332, 20525), (335, 20534), (350, 20552), (352, 20567), (360, 20588), (369, 20618), (378, 20660), (381, 20672), (384, 20684), (385, 20693), (395, 20732), (411, 20762), (421, 20783), (430, 20807), (460, 20906), (476, 20963), (477, 20966), (518, 21170), (534, 21242), (546, 21275), (558, 21302), (562, 21314), (570, 21338), (575, 21353), (591, 21386), (625, 21524),

Gene: SchottB_35 Start: 32971, Stop: 34692, Start Num: 92

Candidate Starts for SchottB_35:

(Start: 92 @32971 has 22 MA's), (151, 33094), (157, 33106), (177, 33172), (203, 33241), (219, 33277), (291, 33502), (310, 33541), (333, 33601), (349, 33646), (367, 33706), (403, 33841), (405, 33847), (421, 33889), (427, 33904), (435, 33940), (446, 33961), (473, 34060), (497, 34144), (503, 34177),

(508, 34222), (509, 34225), (515, 34261), (524, 34297), (526, 34309), (540, 34345), (553, 34381), (572, 34435),

Gene: Sedona_38 Start: 34836, Stop: 36758, Start Num: 29

Candidate Starts for Sedona_38:

(Start: 29 @34836 has 37 MA's), (69, 34971), (Start: 73 @34980 has 1 MA's), (90, 35013), (101, 35037), (135, 35106), (167, 35181), (232, 35373), (234, 35379), (243, 35400), (247, 35418), (250, 35430), (272, 35490), (292, 35544), (345, 35658), (369, 35745), (381, 35799), (397, 35865), (408, 35895), (415, 35907), (430, 35952), (432, 35964), (436, 35982), (447, 36009), (468, 36087), (477, 36114), (485, 36138), (508, 36261), (514, 36303), (539, 36387), (547, 36417), (561, 36444), (580, 36498), (592, 36528), (606, 36600), (611, 36609),

Gene: Sephiroth_30 Start: 24175, Stop: 25827, Start Num: 98

Candidate Starts for Sephiroth_30:

(Start: 98 @24175 has 9 MA's), (187, 24349), (189, 24355), (Start: 190 @24358 has 1 MA's), (197, 24373), (211, 24415), (219, 24427), (231, 24469), (232, 24472), (234, 24478), (238, 24490), (243, 24499), (247, 24517), (250, 24529), (252, 24535), (277, 24601), (283, 24616), (285, 24622), (341, 24757), (350, 24784), (351, 24790), (377, 24883), (415, 25003), (430, 25045), (432, 25057), (477, 25207), (485, 25231), (488, 25249), (503, 25312), (515, 25399), (520, 25414), (524, 25435), (539, 25480), (543, 25498), (551, 25519), (566, 25561), (574, 25585), (594, 25633), (614, 25708), (625, 25759), (639, 25822),

Gene: ShawBrad_29 Start: 22131, Stop: 23966, Start Num: 34

Candidate Starts for ShawBrad_29:

(Start: 34 @22131 has 21 MA's), (90, 22293), (103, 22323), (129, 22377), (138, 22392), (143, 22404), (145, 22407), (152, 22422), (154, 22425), (155, 22428), (192, 22518), (196, 22527), (197, 22530), (226, 22617), (232, 22638), (234, 22644), (243, 22665), (244, 22674), (250, 22695), (252, 22701), (306, 22803), (307, 22806), (325, 22836), (330, 22848), (345, 22872), (369, 22947), (374, 22959), (381, 23001), (387, 23034), (397, 23067), (400, 23073), (408, 23097), (415, 23109), (432, 23166), (436, 23184), (477, 23316), (485, 23340), (488, 23358), (515, 23511), (520, 23526), (522, 23541), (524, 23547), (539, 23592), (543, 23610), (547, 23622), (549, 23628), (557, 23640), (561, 23649), (580, 23703), (589, 23727), (598, 23772), (606, 23805), (609, 23811), (625, 23874), (626, 23877), (629, 23895), (635, 23916), (636, 23925),

Gene: ShayRa_34 Start: 21865, Stop: 23577, Start Num: 45

Candidate Starts for ShayRa_34:

(Start: 45 @21865 has 20 MA's), (82, 21958), (155, 22108), (169, 22147), (Start: 179 @22177 has 1 MA's), (233, 22303), (234, 22306), (281, 22444), (298, 22501), (342, 22546), (359, 22552), (376, 22618), (386, 22672), (428, 22786), (432, 22804), (436, 22822), (461, 22879), (505, 23056), (536, 23215), (547, 23251), (590, 23368), (600, 23419), (621, 23479), (627, 23515), (638, 23563),

Gene: Shivanishola_38 Start: 33192, Stop: 35114, Start Num: 29

Candidate Starts for Shivanishola_38:

(Start: 29 @33192 has 37 MA's), (69, 33327), (Start: 73 @33336 has 1 MA's), (90, 33369), (101, 33393), (135, 33462), (Start: 149 @33492 has 1 MA's), (167, 33537), (232, 33729), (234, 33735), (243, 33756), (247, 33774), (250, 33786), (272, 33846), (292, 33900), (345, 34014), (369, 34101), (381, 34155), (397, 34221), (408, 34251), (415, 34263), (430, 34308), (432, 34320), (436, 34338), (447, 34365), (468, 34443), (477, 34470), (485, 34494), (508, 34617), (514, 34659), (539, 34743), (547, 34773), (580, 34854), (592, 34884), (606, 34956), (611, 34965),

Gene: Sidious_27 Start: 22956, Stop: 24578, Start Num: 164

Candidate Starts for Sidious_27:

(81, 22788), (Start: 164 @22956 has 1 MA's), (Start: 190 @23034 has 1 MA's), (228, 23130), (233, 23148), (238, 23166), (247, 23193), (256, 23217), (286, 23310), (357, 23499), (371, 23541), (377, 23571), (383, 23601), (404, 23667), (415, 23691), (422, 23715), (432, 23745), (441, 23778), (444, 23784), (459, 23832), (460, 23835), (467, 23862), (485, 23913), (512, 24081), (522, 24123), (534, 24180), (545, 24219), (554, 24240), (555, 24243), (559, 24255), (572, 24294), (587, 24333), (600, 24402), (626, 24504),

Gene: Sienna_25 Start: 21340, Stop: 23304, Start Num: 26

Candidate Starts for Sienna_25:

(Start: 26 @21340 has 7 MA's), (Start: 47 @21421 has 14 MA's), (50, 21430), (64, 21469), (66, 21472), (135, 21604), (156, 21646), (163, 21664), (Start: 190 @21742 has 1 MA's), (212, 21805), (245, 21919), (258, 21955), (271, 21994), (289, 22048), (307, 22099), (348, 22198), (369, 22273), (374, 22285), (386, 22360), (430, 22477), (431, 22480), (478, 22636), (519, 22849), (523, 22867), (534, 22924), (536, 22930), (547, 22966), (549, 22972), (607, 23158), (627, 23227), (636, 23269), (643, 23299),

Gene: Sitar_38 Start: 34887, Stop: 36809, Start Num: 29

Candidate Starts for Sitar_38:

(Start: 29 @34887 has 37 MA's), (69, 35022), (Start: 73 @35031 has 1 MA's), (90, 35064), (101, 35088), (135, 35157), (167, 35232), (232, 35424), (234, 35430), (243, 35451), (247, 35469), (250, 35481), (272, 35541), (292, 35595), (345, 35709), (369, 35796), (381, 35850), (393, 35904), (397, 35916), (408, 35946), (415, 35958), (430, 36003), (432, 36015), (436, 36033), (447, 36060), (468, 36138), (477, 36165), (485, 36189), (508, 36312), (514, 36354), (539, 36438), (547, 36468), (580, 36549), (592, 36579), (606, 36651), (611, 36660),

Gene: Sixama_102 Start: 61915, Stop: 63603, Start Num: 78

Candidate Starts for Sixama_102:

(66, 61888), (Start: 68 @61894 has 11 MA's), (75, 61909), (Start: 78 @61915 has 1 MA's), (Start: 100 @61957 has 1 MA's), (142, 62032), (143, 62035), (160, 62056), (Start: 164 @62068 has 1 MA's), (230, 62248), (247, 62299), (264, 62347), (348, 62539), (477, 62971), (485, 62995), (517, 63175), (518, 63178), (522, 63199), (553, 63298), (582, 63376), (605, 63457),

Gene: Smeadley_28 Start: 21508, Stop: 23229, Start Num: 68

Candidate Starts for Smeadley_28:

(Start: 68 @21508 has 11 MA's), (147, 21652), (155, 21667), (196, 21766), (226, 21856), (235, 21892), (243, 21913), (267, 21985), (274, 22009), (290, 22063), (337, 22165), (373, 22261), (382, 22315), (393, 22363), (440, 22492), (449, 22510), (487, 22636), (528, 22840), (529, 22849), (558, 22930), (593, 23026), (619, 23125), (638, 23212),

Gene: SmokingBunny_33 Start: 28209, Stop: 30131, Start Num: 29

Candidate Starts for SmokingBunny_33:

(Start: 29 @28209 has 37 MA's), (63, 28332), (72, 28353), (95, 28401), (Start: 149 @28509 has 1 MA's), (160, 28530), (192, 28611), (203, 28647), (205, 28650), (231, 28728), (232, 28731), (234, 28737), (243, 28758), (250, 28788), (252, 28794), (304, 28929), (339, 29016), (344, 29025), (346, 29031), (348, 29037), (369, 29112), (377, 29145), (381, 29166), (400, 29238), (408, 29262), (415, 29274), (432, 29331), (477, 29481), (485, 29505), (515, 29673), (520, 29688), (547, 29784), (589, 29895), (597, 29931),

Gene: Smoothie_58 Start: 35857, Stop: 37689, Start Num: 47

Candidate Starts for Smoothie_58:

(Start: 47 @35857 has 14 MA's), (94, 35962), (99, 35971), (131, 36025), (172, 36115), (188, 36154), (196, 36172), (233, 36256), (255, 36325), (353, 36595), (394, 36757), (428, 36841), (430, 36847), (465, 36967), (523, 37243), (534, 37300), (536, 37306), (577, 37423), (588, 37450), (607, 37534), (627, 37603),

Gene: Soap141_20 Start: 19261, Stop: 21057, Start Num: 53

Candidate Starts for Soap141_20:

(Start: 52 @19258 has 5 MA's), (Start: 53 @19261 has 23 MA's), (121, 19414), (136, 19438), (172, 19534), (176, 19543), (193, 19585), (195, 19588), (203, 19618), (214, 19645), (241, 19738), (248, 19762), (278, 19846), (290, 19891), (305, 19927), (354, 20047), (362, 20065), (366, 20080), (372, 20098), (373, 20101), (386, 20179), (406, 20236), (407, 20239), (409, 20242), (436, 20326), (440, 20335), (452, 20362), (486, 20473), (487, 20476), (520, 20644), (538, 20719), (544, 20728), (556, 20755), (567, 20788), (573, 20803), (578, 20818), (581, 20824), (600, 20902), (601, 20905), (637, 21040),

Gene: SoilAssassin_25 Start: 20498, Stop: 22021, Start Num: 199

Candidate Starts for SoilAssassin_25:

(Start: 199 @20498 has 19 MA's), (227, 20570), (230, 20582), (238, 20609), (246, 20633), (286, 20753), (288, 20762), (313, 20828), (357, 20942), (371, 20984), (377, 21014), (383, 21044), (404, 21110), (415, 21134), (422, 21158), (430, 21176), (432, 21188), (436, 21206), (441, 21221), (444, 21227), (460, 21278), (467, 21305), (485, 21356), (512, 21524), (518, 21545), (534, 21623), (545, 21662), (554, 21683), (555, 21686), (559, 21698), (572, 21737), (612, 21884), (625, 21944), (626, 21947),

Gene: Soups_33 Start: 21865, Stop: 23577, Start Num: 45

Candidate Starts for Soups_33:

(Start: 45 @21865 has 20 MA's), (82, 21958), (155, 22108), (169, 22147), (Start: 179 @22177 has 1 MA's), (233, 22303), (234, 22306), (281, 22444), (298, 22501), (342, 22546), (359, 22552), (376, 22618), (386, 22672), (428, 22786), (432, 22804), (436, 22822), (461, 22879), (505, 23056), (536, 23215), (547, 23251), (590, 23368), (600, 23419), (621, 23479), (627, 23515), (638, 23563),

Gene: Spooky_29 Start: 22210, Stop: 24102, Start Num: 24

Candidate Starts for Spooky_29:

(Start: 24 @22210 has 2 MA's), (Start: 73 @22372 has 1 MA's), (90, 22402), (Start: 141 @22483 has 1 MA's), (142, 22486), (Start: 149 @22501 has 1 MA's), (150, 22504), (180, 22582), (191, 22606), (226, 22696), (234, 22723), (243, 22744), (247, 22762), (250, 22774), (272, 22834), (292, 22888), (345, 23002), (351, 23029), (369, 23089), (371, 23092), (377, 23122), (408, 23239), (415, 23251), (432, 23308), (436, 23326), (477, 23458), (485, 23482), (492, 23515), (514, 23647), (515, 23650), (539, 23731), (547, 23761), (580, 23842), (611, 23953), (624, 24007),

Gene: Sproutie_25 Start: 20505, Stop: 22028, Start Num: 199

Candidate Starts for Sproutie_25:

(Start: 199 @20505 has 19 MA's), (227, 20577), (230, 20589), (238, 20616), (242, 20622), (246, 20640), (286, 20760), (288, 20769), (313, 20835), (357, 20949), (371, 20991), (377, 21021), (383, 21051), (398, 21111), (404, 21117), (415, 21141), (422, 21165), (430, 21183), (432, 21195), (436, 21213), (441, 21228), (444, 21234), (460, 21285), (467, 21312), (485, 21363), (512, 21531), (545, 21669), (554, 21690), (555, 21693), (559, 21705), (572, 21744), (612, 21891), (625, 21951), (626, 21954),

Gene: Squiddly_31 Start: 23622, Stop: 25514, Start Num: 24

Candidate Starts for Squiddly_31:

(Start: 24 @23622 has 2 MA's), (Start: 73 @23784 has 1 MA's), (90, 23814), (Start: 141 @23895 has 1 MA's), (142, 23898), (Start: 149 @23913 has 1 MA's), (150, 23916), (180, 23994), (191, 24018), (226, 24108), (234, 24135), (243, 24156), (247, 24174), (250, 24186), (272, 24246), (292, 24300), (345, 24414), (351, 24441), (369, 24501), (371, 24504), (377, 24534), (408, 24651), (415, 24663), (432, 24720), (436, 24738), (477, 24870), (485, 24894), (492, 24927), (514, 25059), (515, 25062), (539, 25143), (547, 25173), (580, 25254), (611, 25365), (624, 25419),

Gene: Stephig9_28 Start: 21490, Stop: 23211, Start Num: 68

Candidate Starts for Stephig9_28:

(Start: 68 @21490 has 11 MA's), (147, 21634), (196, 21748), (235, 21874), (243, 21895), (267, 21967), (274, 21991), (290, 22045), (337, 22147), (373, 22243), (382, 22297), (393, 22345), (440, 22474), (449, 22492), (487, 22618), (528, 22822), (529, 22831), (558, 22912), (593, 23008), (619, 23107),

Gene: StorminNorm_36 Start: 31838, Stop: 33559, Start Num: 92

Candidate Starts for StorminNorm_36:

(Start: 92 @31838 has 22 MA's), (151, 31961), (157, 31973), (177, 32039), (203, 32108), (219, 32144), (291, 32369), (310, 32408), (333, 32468), (349, 32513), (367, 32573), (403, 32708), (405, 32714), (421, 32756), (427, 32771), (435, 32807), (446, 32828), (473, 32927), (497, 33011), (503, 33044), (508, 33089), (509, 33092), (515, 33128), (524, 33164), (526, 33176), (540, 33212), (553, 33248), (572, 33302),

Gene: Strosahl_33 Start: 21707, Stop: 23419, Start Num: 45

Candidate Starts for Strosahl_33:

(Start: 45 @21707 has 20 MA's), (82, 21800), (155, 21950), (169, 21989), (Start: 179 @22019 has 1 MA's), (233, 22145), (234, 22148), (281, 22286), (298, 22343), (342, 22388), (359, 22394), (376, 22460), (386, 22514), (428, 22628), (432, 22646), (436, 22664), (461, 22721), (505, 22898), (536, 23057), (547, 23093), (590, 23210), (600, 23261), (621, 23321), (627, 23357), (638, 23405),

Gene: Stultus_35 Start: 32209, Stop: 33930, Start Num: 92

Candidate Starts for Stultus_35:

(Start: 92 @32209 has 22 MA's), (157, 32344), (162, 32353), (170, 32386), (177, 32410), (203, 32479), (229, 32554), (291, 32740), (310, 32779), (312, 32788), (317, 32803), (341, 32860), (349, 32884), (371, 32956), (391, 33043), (403, 33079), (405, 33085), (421, 33127), (427, 33142), (430, 33151), (473, 33298), (497, 33382), (503, 33415), (509, 33463), (522, 33529), (524, 33535), (526, 33547), (537, 33577), (540, 33583), (553, 33619), (557, 33628), (572, 33673),

Gene: Suerte_24 Start: 21509, Stop: 23182, Start Num: 98

Candidate Starts for Suerte_24:

(36, 21338), (38, 21341), (Start: 98 @21509 has 9 MA's), (117, 21551), (125, 21566), (139, 21590), (197, 21719), (226, 21806), (232, 21827), (243, 21854), (244, 21863), (250, 21884), (252, 21890), (272, 21944), (369, 22187), (408, 22331), (415, 22343), (419, 22358), (427, 22379), (430, 22388), (432, 22400), (477, 22550), (491, 22604), (515, 22742), (520, 22757), (547, 22853), (618, 23060),

Gene: Suscepit_28 Start: 22923, Stop: 24428, Start Num: 194

Candidate Starts for Suscepit_28:

(Start: 194 @22923 has 29 MA's), (218, 22992), (222, 23004), (254, 23115), (259, 23127), (261, 23133), (289, 23220), (302, 23256), (303, 23262), (307, 23271), (397, 23565), (421, 23619), (422, 23622), (430, 23643), (443, 23688), (473, 23793), (497, 23877), (508, 23958), (509, 23961), (535, 24084), (571, 24180), (589, 24228), (602, 24288), (617, 24321), (620, 24327), (634, 24399),

Gene: Suzy_25 Start: 22501, Stop: 24465, Start Num: 26

Candidate Starts for Suzy_25:

(Start: 26 @22501 has 7 MA's), (Start: 47 @22582 has 14 MA's), (50, 22591), (66, 22633), (135, 22765), (163, 22825), (171, 22852), (Start: 190 @22903 has 1 MA's), (245, 23080), (258, 23116), (266, 23137), (289, 23209), (296, 23230), (348, 23359), (369, 23434), (386, 23521), (388, 23527), (401, 23566), (408, 23584), (430, 23638), (431, 23641), (523, 24028), (526, 24043), (534, 24085), (536, 24091), (549, 24133), (551, 24136), (607, 24319), (641, 24451), (643, 24460),

Gene: Switzerland_33 Start: 21858, Stop: 23570, Start Num: 45

Candidate Starts for Switzerland_33:

(Start: 45 @21858 has 20 MA's), (82, 21951), (155, 22101), (169, 22140), (Start: 179 @22170 has 1 MA's), (233, 22296), (234, 22299), (281, 22437), (298, 22494), (342, 22539), (359, 22545), (376, 22611), (386, 22665), (428, 22779), (432, 22797), (436, 22815), (461, 22872), (505, 23049), (536, 23208), (547, 23244), (590, 23361), (600, 23412), (621, 23472), (627, 23508), (638, 23556),

Gene: Syleon_30 Start: 24097, Stop: 25749, Start Num: 98

Candidate Starts for Syleon_30:

(Start: 98 @24097 has 9 MA's), (187, 24271), (189, 24277), (Start: 190 @24280 has 1 MA's), (197, 24295), (211, 24337), (219, 24349), (231, 24391), (232, 24394), (234, 24400), (238, 24412), (243, 24421), (247, 24439), (250, 24451), (252, 24457), (277, 24523), (283, 24538), (285, 24544), (341, 24679), (350, 24706), (351, 24712), (377, 24805), (415, 24925), (430, 24967), (432, 24979), (477, 25129), (485, 25153), (488, 25171), (503, 25234), (515, 25321), (520, 25336), (539, 25402), (543, 25420), (551, 25441), (566, 25483), (574, 25507), (594, 25555), (614, 25630), (625, 25681), (639, 25744),

Gene: Tangent_38 Start: 33252, Stop: 35174, Start Num: 29

Candidate Starts for Tangent_38:

(Start: 29 @33252 has 37 MA's), (69, 33387), (Start: 73 @33396 has 1 MA's), (90, 33429), (101, 33453), (135, 33522), (Start: 149 @33552 has 1 MA's), (167, 33597), (232, 33789), (234, 33795), (243, 33816), (247, 33834), (250, 33846), (272, 33906), (292, 33960), (345, 34074), (369, 34161), (381, 34215), (397, 34281), (408, 34311), (415, 34323), (430, 34368), (432, 34380), (436, 34398), (447, 34425), (468, 34503), (477, 34530), (485, 34554), (508, 34677), (514, 34719), (539, 34803), (547, 34833), (561, 34860), (580, 34914), (592, 34944), (606, 35016), (611, 35025),

Gene: Tangerine_36 Start: 31841, Stop: 33562, Start Num: 92

Candidate Starts for Tangerine_36:

(Start: 92 @31841 has 22 MA's), (151, 31964), (157, 31976), (177, 32042), (203, 32111), (219, 32147), (229, 32186), (291, 32372), (310, 32411), (333, 32471), (349, 32516), (367, 32576), (403, 32711), (405, 32717), (421, 32759), (427, 32774), (435, 32810), (446, 32831), (473, 32930), (497, 33014), (503, 33047), (508, 33092), (509, 33095), (515, 33131), (524, 33167), (526, 33179), (540, 33215), (553, 33251), (572, 33305),

Gene: Tarzan_25 Start: 19667, Stop: 21313, Start Num: 87

Candidate Starts for Tarzan_25:

(Start: 87 @19667 has 3 MA's), (142, 19766), (186, 19862), (192, 19877), (234, 20003), (243, 20024), (250, 20054), (316, 20180), (369, 20300), (371, 20303), (374, 20312), (381, 20354), (383, 20363), (397, 20420), (402, 20432), (408, 20450), (415, 20462), (432, 20519), (446, 20561), (451, 20576), (477, 20669), (485, 20693), (488, 20711), (508, 20819), (515, 20864), (547, 20975), (549, 20981), (561, 21002), (574, 21044), (589, 21080), (598, 21125), (626, 21230),

Gene: Tayonia_28 Start: 22923, Stop: 24428, Start Num: 194

Candidate Starts for Tayonia_28:

(Start: 194 @22923 has 29 MA's), (218, 22992), (222, 23004), (254, 23115), (259, 23127), (261, 23133), (289, 23220), (302, 23256), (303, 23262), (307, 23271), (397, 23565), (421, 23619), (422, 23622), (430, 23643), (443, 23688), (473, 23793), (497, 23877), (508, 23958), (509, 23961), (535, 24084), (571, 24180), (589, 24228), (602, 24288), (617, 24321), (620, 24327), (634, 24399),

Gene: Terapin_25 Start: 21340, Stop: 23304, Start Num: 26

Candidate Starts for Terapin_25:

(Start: 26 @21340 has 7 MA's), (Start: 47 @21421 has 14 MA's), (50, 21430), (64, 21469), (66, 21472), (135, 21604), (156, 21646), (163, 21664), (Start: 190 @21742 has 1 MA's), (212, 21805), (245, 21919), (258, 21955), (271, 21994), (289, 22048), (307, 22099), (348, 22198), (369, 22273), (374, 22285),

(386, 22360), (430, 22477), (431, 22480), (433, 22492), (519, 22849), (523, 22867), (534, 22924), (536, 22930), (547, 22966), (549, 22972), (607, 23158), (627, 23227),

Gene: ThankyouJordi_25 Start: 22901, Stop: 24409, Start Num: 194

Candidate Starts for ThankyouJordi_25:

(60, 22586), (108, 22694), (144, 22763), (Start: 146 @22766 has 5 MA's), (158, 22790), (161, 22796), (Start: 194 @22901 has 29 MA's), (221, 22979), (222, 22982), (247, 23072), (260, 23108), (261, 23111), (302, 23234), (303, 23240), (307, 23249), (382, 23480), (395, 23543), (397, 23546), (412, 23573), (421, 23600), (422, 23603), (450, 23684), (473, 23774), (509, 23942), (524, 24017), (527, 24032), (571, 24161), (597, 24245), (620, 24308), (634, 24380),

Gene: Thimann_26 Start: 21977, Stop: 23650, Start Num: 98

Candidate Starts for Thimann_26:

(36, 21806), (38, 21809), (Start: 98 @21977 has 9 MA's), (117, 22019), (125, 22034), (139, 22058), (197, 22187), (226, 22274), (232, 22295), (243, 22322), (244, 22331), (250, 22352), (252, 22358), (272, 22412), (369, 22655), (408, 22799), (415, 22811), (419, 22826), (427, 22847), (430, 22856), (432, 22868), (477, 23018), (491, 23072), (515, 23210), (520, 23225), (547, 23321), (618, 23528),

Gene: Thing3_36 Start: 33130, Stop: 35052, Start Num: 29

Candidate Starts for Thing3_36:

(Start: 29 @33130 has 37 MA's), (69, 33265), (Start: 73 @33274 has 1 MA's), (90, 33307), (101, 33331), (135, 33400), (167, 33475), (232, 33667), (234, 33673), (243, 33694), (247, 33712), (250, 33724), (272, 33784), (292, 33838), (345, 33952), (369, 34039), (381, 34093), (393, 34147), (397, 34159), (408, 34189), (415, 34201), (430, 34246), (432, 34258), (436, 34276), (447, 34303), (468, 34381), (477, 34408), (485, 34432), (508, 34555), (514, 34597), (539, 34681), (547, 34711), (561, 34738), (580, 34792), (592, 34822), (606, 34894), (611, 34903),

Gene: TillyBobJoe_33 Start: 28008, Stop: 29942, Start Num: 29

Candidate Starts for TillyBobJoe_33:

(Start: 29 @28008 has 37 MA's), (63, 28131), (72, 28152), (95, 28200), (Start: 149 @28308 has 1 MA's), (160, 28329), (192, 28410), (203, 28446), (205, 28449), (231, 28527), (232, 28530), (234, 28536), (243, 28557), (250, 28587), (252, 28593), (304, 28728), (339, 28815), (344, 28824), (346, 28830), (348, 28836), (369, 28911), (377, 28944), (381, 28965), (400, 29037), (408, 29061), (415, 29073), (432, 29130), (477, 29280), (485, 29304), (515, 29472), (520, 29487), (547, 29583), (589, 29694), (597, 29730),

Gene: TimTam_26 Start: 22926, Stop: 24431, Start Num: 194

Candidate Starts for TimTam_26:

(60, 22611), (108, 22719), (144, 22788), (Start: 146 @22791 has 5 MA's), (158, 22815), (161, 22821), (Start: 194 @22926 has 29 MA's), (218, 22995), (222, 23007), (254, 23118), (257, 23124), (259, 23130), (261, 23136), (289, 23223), (302, 23259), (303, 23265), (307, 23274), (397, 23568), (421, 23622), (422, 23625), (430, 23646), (443, 23691), (473, 23796), (497, 23880), (508, 23961), (509, 23964), (571, 24183), (589, 24231), (602, 24291), (617, 24324), (620, 24330), (634, 24402),

Gene: TinyDot_26 Start: 19859, Stop: 21466, Start Num: 146

Candidate Starts for TinyDot_26:

(Start: 146 @19859 has 5 MA's), (177, 19928), (187, 19943), (189, 19949), (203, 19991), (232, 20075), (234, 20081), (243, 20102), (247, 20120), (266, 20171), (272, 20192), (277, 20204), (350, 20390), (369, 20456), (371, 20459), (377, 20489), (393, 20567), (404, 20588), (408, 20600), (415, 20612), (432, 20669), (444, 20708), (477, 20819), (492, 20876), (501, 20915), (515, 21011), (524, 21047), (539, 21092), (549, 21128), (580, 21203), (589, 21227), (598, 21272), (606, 21305), (611, 21314), (626, 21377),

Gene: Togo_33 Start: 28209, Stop: 30131, Start Num: 29

Candidate Starts for Togo_33:

(Start: 29 @28209 has 37 MA's), (63, 28332), (72, 28353), (95, 28401), (Start: 149 @28509 has 1 MA's), (160, 28530), (192, 28611), (203, 28647), (205, 28650), (231, 28728), (232, 28731), (234, 28737), (243, 28758), (250, 28788), (252, 28794), (304, 28929), (339, 29016), (344, 29025), (346, 29031), (348, 29037), (369, 29112), (377, 29145), (381, 29166), (400, 29238), (408, 29262), (415, 29274), (432, 29331), (477, 29481), (485, 29505), (515, 29673), (520, 29688), (547, 29784), (589, 29895), (597, 29931),

Gene: Toniann_56 Start: 35344, Stop: 37176, Start Num: 47

Candidate Starts for Toniann_56:

(Start: 47 @35344 has 14 MA's), (94, 35449), (99, 35458), (131, 35512), (172, 35602), (188, 35641), (196, 35659), (233, 35743), (255, 35812), (353, 36082), (394, 36244), (428, 36328), (430, 36334), (465, 36454), (523, 36730), (534, 36787), (536, 36793), (577, 36910), (588, 36937), (607, 37021), (627, 37090),

Gene: Tourach_20 Start: 19226, Stop: 21022, Start Num: 53

Candidate Starts for Tourach_20:

(Start: 53 @19226 has 23 MA's), (121, 19379), (136, 19403), (177, 19511), (195, 19553), (203, 19583), (214, 19610), (239, 19700), (241, 19703), (248, 19727), (278, 19811), (290, 19856), (311, 19907), (354, 20012), (366, 20045), (373, 20066), (386, 20144), (409, 20207), (436, 20291), (440, 20300), (486, 20438), (502, 20516), (520, 20609), (523, 20624), (538, 20684), (544, 20693), (556, 20720), (559, 20729), (567, 20753), (573, 20768), (578, 20783), (581, 20789), (586, 20801), (618, 20918), (635, 20993), (637, 21005),

Gene: Trax_30 Start: 25810, Stop: 27396, Start Num: 98

Candidate Starts for Trax_30:

(Start: 98 @25810 has 9 MA's), (115, 25846), (186, 25990), (195, 26011), (196, 26014), (197, 26017), (204, 26041), (217, 26071), (219, 26074), (231, 26116), (232, 26119), (243, 26146), (244, 26155), (250, 26176), (252, 26182), (271, 26233), (272, 26236), (300, 26257), (315, 26299), (340, 26320), (341, 26323), (350, 26335), (369, 26401), (381, 26455), (389, 26491), (415, 26554), (423, 26578), (430, 26596), (432, 26608), (436, 26626), (441, 26641), (477, 26758), (479, 26764), (485, 26782), (487, 26788), (488, 26800), (495, 26827), (510, 26926), (515, 26950), (520, 26965), (530, 27004), (539, 27031), (541, 27037), (543, 27049), (547, 27061), (549, 27067), (564, 27103), (582, 27157), (619, 27286), (624, 27313), (633, 27346),

Gene: Trine_24 Start: 19054, Stop: 20592, Start Num: 181

Candidate Starts for Trine_24:

(Start: 181 @19054 has 2 MA's), (223, 19165), (226, 19174), (244, 19240), (250, 19261), (256, 19273), (274, 19327), (307, 19426), (317, 19453), (379, 19648), (412, 19750), (421, 19777), (473, 19951), (493, 20017), (497, 20035), (503, 20068), (524, 20191), (526, 20203), (535, 20239), (554, 20287), (560, 20302), (608, 20455), (611, 20461), (615, 20473), (616, 20482),

Gene: Trumpet_28 Start: 22923, Stop: 24428, Start Num: 194

Candidate Starts for Trumpet_28:

(Start: 194 @22923 has 29 MA's), (218, 22992), (222, 23004), (254, 23115), (259, 23127), (261, 23133), (289, 23220), (302, 23256), (303, 23262), (307, 23271), (397, 23565), (421, 23619), (422, 23622), (430, 23643), (443, 23688), (473, 23793), (497, 23877), (508, 23958), (509, 23961), (535, 24084), (571, 24180), (589, 24228), (602, 24288), (617, 24321), (620, 24327), (634, 24399),

Gene: TuertoX_25 Start: 20505, Stop: 22028, Start Num: 199

Candidate Starts for TuertoX_25:

(Start: 199 @20505 has 19 MA's), (227, 20577), (230, 20589), (238, 20616), (242, 20622), (246, 20640), (286, 20760), (288, 20769), (313, 20835), (357, 20949), (371, 20991), (377, 21021), (383, 21051), (398, 21111), (404, 21117), (415, 21141), (422, 21165), (430, 21183), (432, 21195), (436, 21213), (441, 21228), (444, 21234), (460, 21285), (467, 21312), (485, 21363), (512, 21531), (545, 21669), (554, 21690), (555, 21693), (559, 21705), (572, 21744), (612, 21891), (625, 21951), (626, 21954),

Gene: Tycho_36 Start: 31930, Stop: 33651, Start Num: 92

Candidate Starts for Tycho_36:

(Start: 92 @31930 has 22 MA's), (151, 32053), (157, 32065), (177, 32131), (203, 32200), (219, 32236), (291, 32461), (310, 32500), (333, 32560), (349, 32605), (367, 32665), (403, 32800), (405, 32806), (421, 32848), (427, 32863), (435, 32899), (446, 32920), (473, 33019), (497, 33103), (503, 33136), (508, 33181), (509, 33184), (515, 33220), (524, 33256), (526, 33268), (540, 33304), (553, 33340), (572, 33394),

Gene: Underpass_20 Start: 19233, Stop: 21029, Start Num: 53

Candidate Starts for Underpass_20:

(Start: 52 @19230 has 5 MA's), (Start: 53 @19233 has 23 MA's), (121, 19386), (136, 19410), (172, 19506), (176, 19515), (193, 19557), (195, 19560), (203, 19590), (214, 19617), (241, 19710), (248, 19734), (278, 19818), (290, 19863), (305, 19899), (354, 20019), (362, 20037), (366, 20052), (372, 20070), (373, 20073), (386, 20151), (406, 20208), (407, 20211), (409, 20214), (436, 20298), (440, 20307), (452, 20334), (486, 20445), (487, 20448), (520, 20616), (538, 20691), (544, 20700), (556, 20727), (567, 20760), (573, 20775), (578, 20790), (581, 20796), (600, 20874), (601, 20877), (618, 20925), (637, 21012),

Gene: Upyo_24 Start: 19301, Stop: 20836, Start Num: 181

Candidate Starts for Upyo_24:

(174, 19277), (Start: 181 @19301 has 2 MA's), (223, 19412), (242, 19475), (274, 19574), (317, 19700), (321, 19706), (323, 19712), (329, 19730), (335, 19745), (338, 19751), (341, 19757), (363, 19826), (368, 19844), (380, 19898), (399, 19976), (414, 20003), (432, 20063), (436, 20081), (473, 20201), (485, 20234), (490, 20261), (509, 20369), (520, 20426), (522, 20441), (528, 20465), (603, 20699), (628, 20786),

Gene: Valary_36 Start: 29154, Stop: 31076, Start Num: 29

Candidate Starts for Valary_36:

(Start: 29 @29154 has 37 MA's), (63, 29277), (72, 29298), (95, 29346), (Start: 149 @29454 has 1 MA's), (160, 29475), (192, 29556), (203, 29592), (205, 29595), (231, 29673), (232, 29676), (234, 29682), (243, 29703), (250, 29733), (252, 29739), (304, 29874), (339, 29961), (344, 29970), (346, 29976), (348, 29982), (369, 30057), (377, 30090), (381, 30111), (400, 30183), (408, 30207), (415, 30219), (432, 30276), (477, 30426), (485, 30450), (515, 30618), (520, 30633), (547, 30729), (589, 30840), (597, 30876),

Gene: Vasanti_24 Start: 20059, Stop: 21591, Start Num: 199

Candidate Starts for Vasanti_24:

(Start: 199 @20059 has 19 MA's), (202, 20065), (227, 20131), (242, 20176), (254, 20215), (282, 20296), (286, 20311), (288, 20320), (313, 20386), (357, 20512), (377, 20584), (383, 20614), (404, 20680), (415, 20704), (422, 20728), (430, 20746), (432, 20758), (444, 20797), (460, 20848), (467, 20875), (512, 21094), (521, 21133), (522, 21136), (533, 21190), (535, 21196), (545, 21232), (554, 21253), (555, 21256), (559, 21268), (572, 21307), (587, 21346), (612, 21454), (626, 21517),

Gene: Vetric_20 Start: 19234, Stop: 21030, Start Num: 53

Candidate Starts for Vetric_20:

(Start: 52 @19231 has 5 MA's), (Start: 53 @19234 has 23 MA's), (121, 19387), (136, 19411), (172, 19507), (176, 19516), (195, 19561), (198, 19570), (203, 19591), (214, 19618), (241, 19711), (248, 19735), (278, 19819), (290, 19864), (354, 20020), (362, 20038), (366, 20053), (372, 20071), (373, 20074), (386, 20152), (406, 20209), (407, 20212), (409, 20215), (436, 20299), (440, 20308), (452, 20335), (486, 20446), (487, 20449), (520, 20617), (523, 20632), (538, 20692), (544, 20701), (556, 20728), (567, 20761), (573, 20776), (578, 20791), (581, 20797), (600, 20875), (601, 20878), (618, 20926), (637, 21013),

Gene: Vivi2_40 Start: 34410, Stop: 36332, Start Num: 29

Candidate Starts for Vivi2_40:

(Start: 29 @34410 has 37 MA's), (69, 34545), (Start: 73 @34554 has 1 MA's), (90, 34587), (101, 34611), (135, 34680), (Start: 149 @34710 has 1 MA's), (167, 34755), (232, 34947), (234, 34953), (243, 34974), (247, 34992), (250, 35004), (272, 35064), (292, 35118), (345, 35232), (369, 35319), (381, 35373), (397, 35439), (408, 35469), (415, 35481), (430, 35526), (432, 35538), (436, 35556), (447, 35583), (468, 35661), (477, 35688), (485, 35712), (508, 35835), (514, 35877), (539, 35961), (547, 35991), (561, 36018), (580, 36072), (592, 36102), (606, 36174), (611, 36183),

Gene: Waits_33 Start: 21713, Stop: 23425, Start Num: 45

Candidate Starts for Waits_33:

(Start: 45 @21713 has 20 MA's), (82, 21806), (140, 21923), (155, 21956), (169, 21995), (Start: 179 @22025 has 1 MA's), (233, 22151), (234, 22154), (281, 22292), (298, 22349), (342, 22394), (359, 22400), (376, 22466), (386, 22520), (428, 22634), (432, 22652), (436, 22670), (461, 22727), (505, 22904), (536, 23063), (547, 23099), (590, 23216), (600, 23267), (621, 23327), (627, 23363), (638, 23411),

Gene: Warrior24_34 Start: 21717, Stop: 23429, Start Num: 45

Candidate Starts for Warrior24_34:

(Start: 45 @21717 has 20 MA's), (82, 21810), (155, 21960), (169, 21999), (Start: 179 @22029 has 1 MA's), (233, 22155), (234, 22158), (281, 22296), (298, 22353), (342, 22398), (359, 22404), (376, 22470), (386, 22524), (428, 22638), (432, 22656), (436, 22674), (461, 22731), (505, 22908), (536, 23067), (547, 23103), (590, 23220), (600, 23271), (621, 23331), (627, 23367), (638, 23415),

Gene: WelcomeAyanna_25 Start: 22901, Stop: 24409, Start Num: 194

Candidate Starts for WelcomeAyanna_25:

(60, 22586), (108, 22694), (144, 22763), (Start: 146 @22766 has 5 MA's), (158, 22790), (161, 22796), (Start: 194 @22901 has 29 MA's), (221, 22979), (222, 22982), (247, 23072), (260, 23108), (261, 23111), (302, 23234), (303, 23240), (307, 23249), (382, 23480), (395, 23543), (397, 23546), (412, 23573), (421, 23600), (422, 23603), (450, 23684), (473, 23774), (509, 23942), (524, 24017), (527, 24032), (571, 24161), (597, 24245), (620, 24308), (634, 24380),

Gene: Whiteclaw_25 Start: 20505, Stop: 22028, Start Num: 199

Candidate Starts for Whiteclaw_25:

(Start: 199 @20505 has 19 MA's), (227, 20577), (230, 20589), (238, 20616), (242, 20622), (246, 20640), (286, 20760), (288, 20769), (313, 20835), (357, 20949), (371, 20991), (377, 21021), (383, 21051), (398, 21111), (404, 21117), (415, 21141), (422, 21165), (430, 21183), (432, 21195), (436, 21213), (441, 21228), (444, 21234), (460, 21285), (467, 21312), (485, 21363), (512, 21531), (545, 21669), (554, 21690), (555, 21693), (559, 21705), (572, 21744), (612, 21891), (625, 21951), (626, 21954),

Gene: Whitney_30 Start: 23030, Stop: 24865, Start Num: 34

Candidate Starts for Whitney_30:

(Start: 34 @23030 has 21 MA's), (90, 23192), (103, 23222), (129, 23276), (138, 23291), (143, 23303), (145, 23306), (152, 23321), (154, 23324), (155, 23327), (192, 23417), (196, 23426), (197, 23429),

(226, 23516), (232, 23537), (234, 23543), (243, 23564), (244, 23573), (250, 23594), (252, 23600), (306, 23702), (307, 23705), (325, 23735), (330, 23747), (345, 23771), (369, 23846), (374, 23858), (381, 23900), (387, 23933), (397, 23966), (400, 23972), (408, 23996), (415, 24008), (432, 24065), (436, 24083), (477, 24215), (485, 24239), (488, 24257), (515, 24410), (520, 24425), (521, 24437), (522, 24440), (524, 24446), (539, 24491), (543, 24509), (547, 24521), (549, 24527), (557, 24539), (561, 24548), (580, 24602), (598, 24671), (606, 24704), (609, 24710), (625, 24773), (626, 24776), (629, 24794), (635, 24815), (636, 24824),

Gene: Wigglewiggle_20 Start: 19260, Stop: 21056, Start Num: 53

Candidate Starts for Wigglewiggle_20:

(Start: 52 @19257 has 5 MA's), (Start: 53 @19260 has 23 MA's), (121, 19413), (136, 19437), (172, 19533), (176, 19542), (193, 19584), (195, 19587), (203, 19617), (214, 19644), (241, 19737), (248, 19761), (278, 19845), (290, 19890), (305, 19926), (354, 20046), (362, 20064), (366, 20079), (372, 20097), (373, 20100), (386, 20178), (406, 20235), (407, 20238), (409, 20241), (436, 20325), (440, 20334), (452, 20361), (486, 20472), (487, 20475), (520, 20643), (538, 20718), (544, 20727), (556, 20754), (567, 20787), (573, 20802), (578, 20817), (581, 20823), (600, 20901), (601, 20904), (637, 21039),

Gene: Wilder_20 Start: 19233, Stop: 21029, Start Num: 53

Candidate Starts for Wilder_20:

(Start: 52 @19230 has 5 MA's), (Start: 53 @19233 has 23 MA's), (121, 19386), (136, 19410), (172, 19506), (176, 19515), (193, 19557), (195, 19560), (203, 19590), (214, 19617), (241, 19710), (248, 19734), (278, 19818), (290, 19863), (305, 19899), (354, 20019), (362, 20037), (366, 20052), (372, 20070), (373, 20073), (386, 20151), (406, 20208), (407, 20211), (409, 20214), (436, 20298), (440, 20307), (452, 20334), (486, 20445), (487, 20448), (520, 20616), (538, 20691), (544, 20700), (556, 20727), (567, 20760), (573, 20775), (578, 20790), (581, 20796), (600, 20874), (601, 20877), (618, 20925), (637, 21012),

Gene: WilliamBoone_56 Start: 34690, Stop: 36522, Start Num: 47

Candidate Starts for WilliamBoone_56:

(Start: 47 @34690 has 14 MA's), (83, 34774), (94, 34795), (123, 34849), (172, 34948), (187, 34984), (188, 34987), (196, 35005), (201, 35008), (233, 35089), (278, 35224), (353, 35428), (376, 35509), (394, 35590), (428, 35674), (445, 35728), (465, 35800), (516, 36049), (523, 36076), (534, 36133), (536, 36139), (584, 36274), (607, 36367), (627, 36436),

Gene: Winky_20 Start: 19225, Stop: 21024, Start Num: 52

Candidate Starts for Winky_20:

(Start: 52 @19225 has 5 MA's), (Start: 53 @19228 has 23 MA's), (121, 19381), (136, 19405), (172, 19501), (176, 19510), (195, 19555), (203, 19585), (214, 19612), (241, 19705), (248, 19729), (278, 19813), (290, 19858), (354, 20014), (362, 20032), (366, 20047), (372, 20065), (373, 20068), (386, 20146), (406, 20203), (409, 20209), (436, 20293), (440, 20302), (486, 20440), (487, 20443), (520, 20611), (538, 20686), (544, 20695), (556, 20722), (562, 20740), (567, 20755), (573, 20770), (578, 20785), (581, 20791), (600, 20869), (601, 20872), (618, 20920), (637, 21007),

Gene: Wizard_33 Start: 28352, Stop: 30274, Start Num: 29

Candidate Starts for Wizard_33:

(Start: 29 @28352 has 37 MA's), (63, 28475), (72, 28496), (95, 28544), (Start: 149 @28652 has 1 MA's), (160, 28673), (192, 28754), (203, 28790), (205, 28793), (231, 28871), (232, 28874), (234, 28880), (243, 28901), (250, 28931), (252, 28937), (304, 29072), (339, 29159), (344, 29168), (346, 29174), (348, 29180), (369, 29255), (377, 29288), (381, 29309), (400, 29381), (408, 29405), (415, 29417), (432, 29474), (477, 29624), (485, 29648), (515, 29816), (520, 29831), (547, 29927), (589, 30038), (597, 30074),

Gene: Yeet412_25 Start: 20498, Stop: 22021, Start Num: 199

Candidate Starts for Yeet412_25:

(Start: 199 @20498 has 19 MA's), (227, 20570), (230, 20582), (238, 20609), (246, 20633), (286, 20753), (288, 20762), (313, 20828), (357, 20942), (371, 20984), (377, 21014), (383, 21044), (404, 21110), (415, 21134), (422, 21158), (430, 21176), (432, 21188), (436, 21206), (441, 21221), (444, 21227), (460, 21278), (467, 21305), (485, 21356), (512, 21524), (518, 21545), (534, 21623), (545, 21662), (554, 21683), (555, 21686), (559, 21698), (572, 21737), (612, 21884), (625, 21944), (626, 21947),

Gene: Yeezy_28 Start: 22145, Stop: 23650, Start Num: 194

Candidate Starts for Yeezy_28:

(108, 21938), (144, 22007), (Start: 146 @22010 has 5 MA's), (158, 22034), (161, 22040), (Start: 194 @22145 has 29 MA's), (218, 22214), (222, 22226), (254, 22337), (259, 22349), (261, 22355), (289, 22442), (302, 22478), (303, 22484), (307, 22493), (397, 22787), (421, 22841), (422, 22844), (430, 22865), (443, 22910), (473, 23015), (497, 23099), (508, 23180), (509, 23183), (535, 23306), (571, 23402), (589, 23450), (595, 23465), (602, 23510), (617, 23543), (620, 23549), (634, 23621),

Gene: YorkOnyx_37 Start: 32189, Stop: 33910, Start Num: 92

Candidate Starts for YorkOnyx_37:

(Start: 92 @32189 has 22 MA's), (151, 32312), (157, 32324), (177, 32390), (203, 32459), (219, 32495), (229, 32534), (291, 32720), (310, 32759), (333, 32819), (349, 32864), (367, 32924), (403, 33059), (405, 33065), (421, 33107), (427, 33122), (435, 33158), (446, 33179), (473, 33278), (497, 33362), (503, 33395), (508, 33440), (509, 33443), (524, 33515), (526, 33527), (540, 33563), (553, 33599), (572, 33653),

Gene: Yvonnetastic_53 Start: 36927, Stop: 38693, Start Num: 55

Candidate Starts for Yvonnetastic_53:

(Start: 55 @36927 has 2 MA's), (61, 36948), (106, 37044), (197, 37242), (201, 37260), (205, 37269), (217, 37302), (243, 37386), (276, 37485), (341, 37632), (350, 37653), (369, 37719), (375, 37737), (383, 37782), (432, 37926), (444, 37965), (477, 38076), (506, 38202), (522, 38298), (533, 38340), (535, 38346), (549, 38388), (551, 38391),

Gene: Zakai_20 Start: 19222, Stop: 21018, Start Num: 53

Candidate Starts for Zakai_20:

(Start: 52 @19219 has 5 MA's), (Start: 53 @19222 has 23 MA's), (121, 19375), (136, 19399), (172, 19495), (176, 19504), (195, 19549), (203, 19579), (214, 19606), (241, 19699), (248, 19723), (278, 19807), (290, 19852), (354, 20008), (362, 20026), (366, 20041), (372, 20059), (373, 20062), (386, 20140), (406, 20197), (407, 20200), (409, 20203), (436, 20287), (440, 20296), (452, 20323), (486, 20434), (487, 20437), (520, 20605), (538, 20680), (544, 20689), (556, 20716), (567, 20749), (573, 20764), (578, 20779), (581, 20785), (600, 20863), (601, 20866), (618, 20914), (637, 21001),

Gene: Zameen_28 Start: 22923, Stop: 24428, Start Num: 194

Candidate Starts for Zameen_28:

(Start: 194 @22923 has 29 MA's), (218, 22992), (222, 23004), (254, 23115), (259, 23127), (261, 23133), (289, 23220), (302, 23256), (303, 23262), (307, 23271), (397, 23565), (421, 23619), (422, 23622), (430, 23643), (443, 23688), (473, 23793), (497, 23877), (508, 23958), (509, 23961), (535, 24084), (571, 24180), (589, 24228), (602, 24288), (617, 24321), (620, 24327), (634, 24399),

Gene: ZhongYanYuan_19 Start: 19053, Stop: 20849, Start Num: 53

Candidate Starts for ZhongYanYuan_19:

(Start: 53 @19053 has 23 MA's), (105, 19173), (111, 19194), (121, 19206), (136, 19230), (147, 19257), (172, 19326), (176, 19335), (189, 19368), (195, 19380), (203, 19410), (214, 19437), (248, 19554), (265, 19602), (278, 19638), (290, 19683), (311, 19734), (354, 19839), (362, 19857), (372, 19890),

(373, 19893), (378, 19932), (386, 19971), (407, 20031), (409, 20034), (436, 20118), (486, 20265), (502, 20343), (520, 20436), (523, 20451), (538, 20511), (544, 20520), (556, 20547), (573, 20595), (578, 20610), (600, 20694), (601, 20697), (618, 20745), (623, 20760), (637, 20832),

Gene: Zirinka_26 Start: 22938, Stop: 24443, Start Num: 194

Candidate Starts for Zirinka_26:

(60, 22623), (108, 22731), (144, 22800), (Start: 146 @22803 has 5 MA's), (158, 22827), (161, 22833), (Start: 194 @22938 has 29 MA's), (218, 23007), (222, 23019), (254, 23130), (257, 23136), (259, 23142), (261, 23148), (262, 23154), (289, 23235), (302, 23271), (303, 23277), (307, 23286), (397, 23580), (421, 23634), (422, 23637), (430, 23658), (443, 23703), (473, 23808), (497, 23892), (508, 23973), (509, 23976), (571, 24195), (589, 24243), (602, 24303), (617, 24336), (620, 24342), (634, 24414),