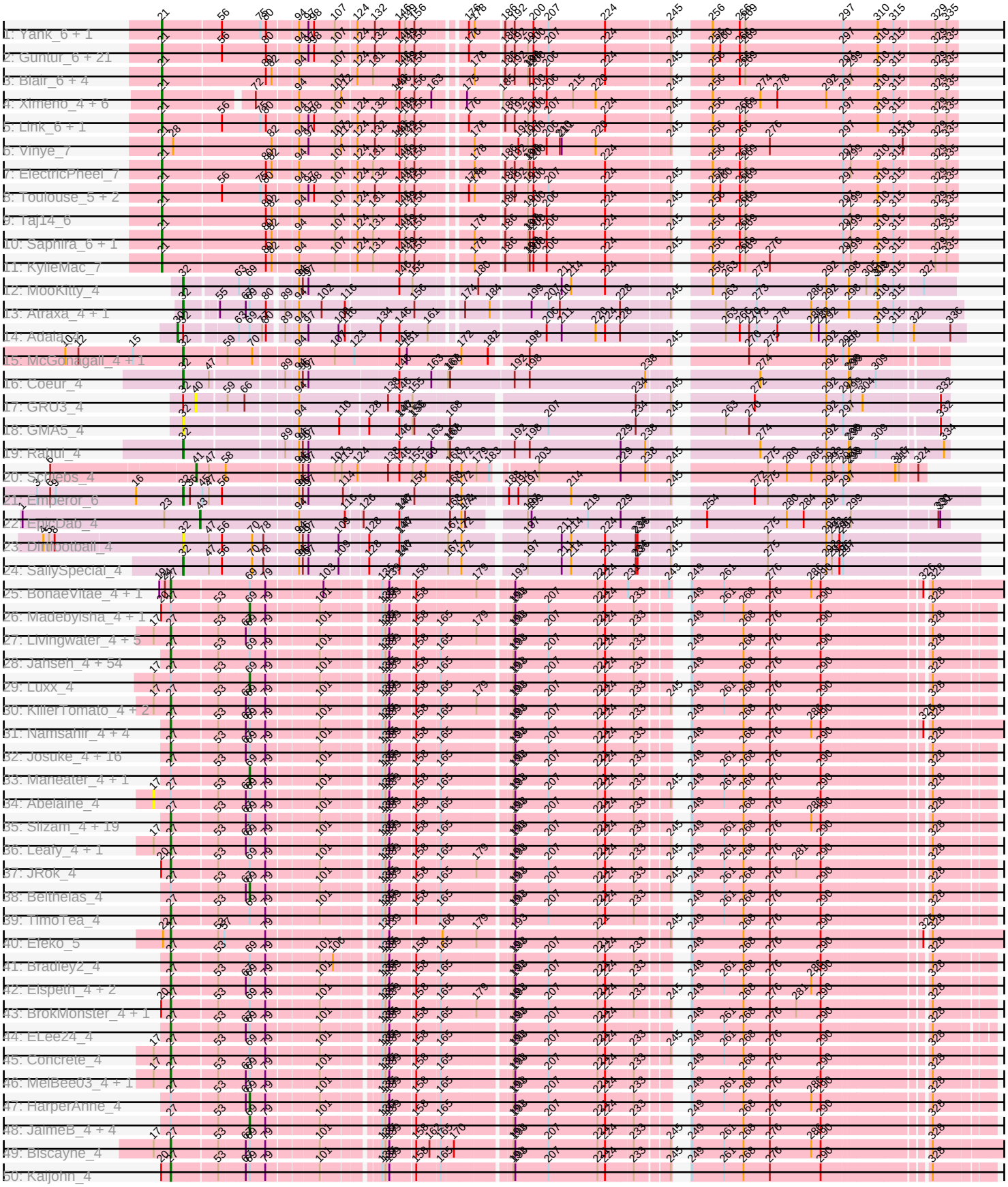
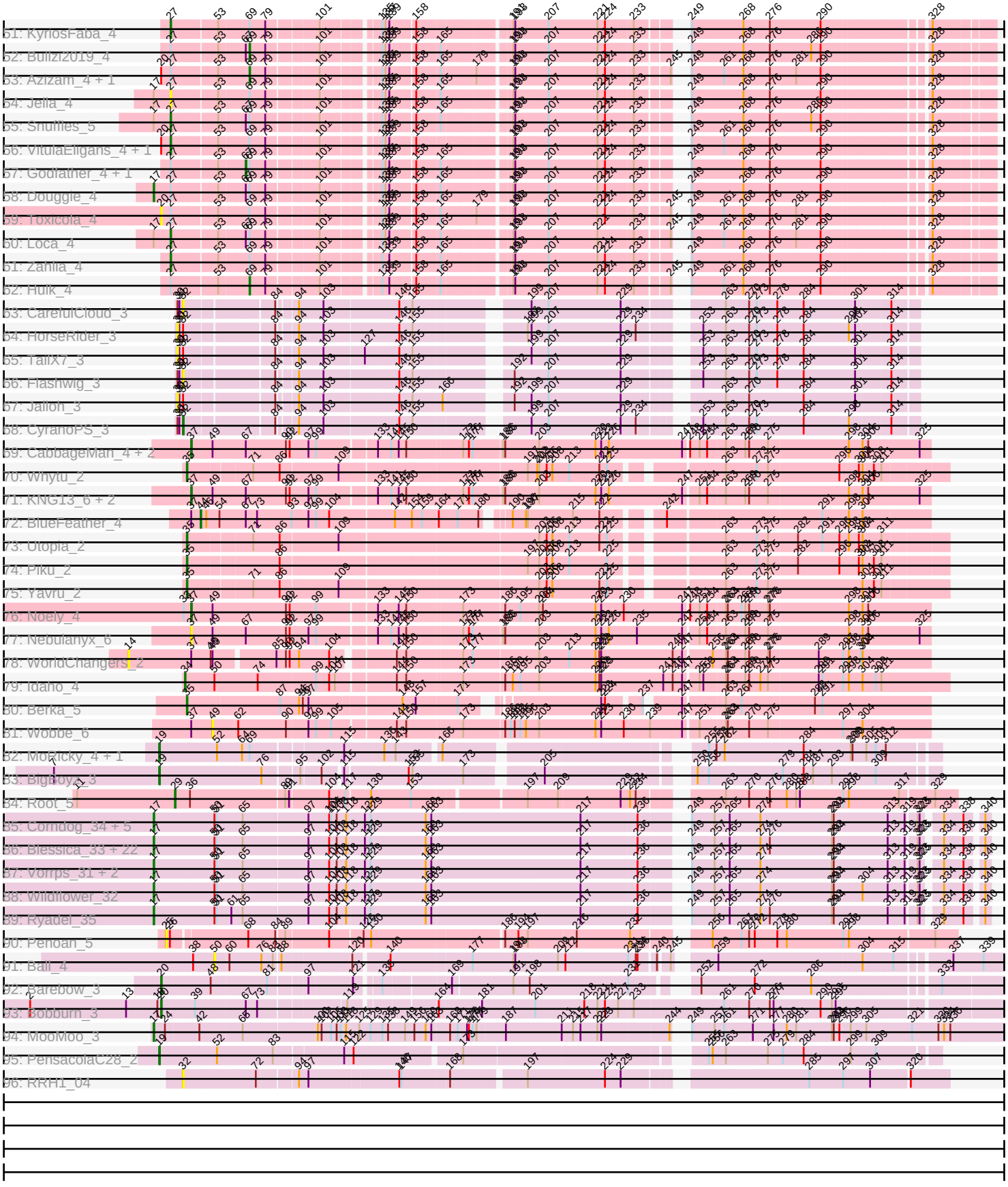
Pham 347189



Pham 347189


51: KyriosFaba_4
52: Bullzi2019_4
53: Azizam_4 + 1
54: Jella_4
55: Shumles_5
56: VitulaEligans_4 + 1
57: Godfather_4 + 1
58: Douggie_4
59: Toxicola_4
60: Loca_4
61: Zahlia_4
62: Hulk_4
63: CarefulCloud_3
64: HorseRider_3
65: TallX7_3
66: Flashwig_3
67: Jallon_3
68: CyranoPS_3
69: CabbageMan_4 + 2
70: Whytu_2
71: KING13_6 + 2
72: BlueFeather_4
73: Utopia_2
74: Piku_2
75: Yavru_2
76: Noely_4
77: Nebulanyx_6
78: WorldChangers_2
79: Idaho_4
80: Berka_5
81: Wobbe_6
82: MoRicky_4 + 1
83: BigBoy_3
84: Root_5
85: Corndog_34 + 5
86: Blessica_33 + 22
87: Vomps_31 + 2
88: Wildflower_32
89: Ryadel_35
90: Penoan_5
91: Ball_4
92: Barebow_3
93: Bobburn_3
94: MooMoo_3
95: PensacolaC28_2
96: RRH1_04

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 347189 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347189 has 283 members, 24 are drafts.

Phages represented in each track:
• Track 1 : Yank_6, Decurro_6
• Track 2 : Guntur_6, Hunnie_6, Copper_6, Maggie_6, Ronnie_6, Courtney3_6, Stratus_6, CGermain_6, LouisXIV_6, Inspire2_6, Sandman_6, Arby_6, Azathoth_6, TymAbreu_6, Chestnut_6, Massimo_6, Moloch_6, Dewayne_6, Jessica_7, TinoCrisci_6, Prospero_6, Mariposa_6
• Track 3 : Blair_6, Elkhorn_6, Laila_7, Lore_6, StewieGriff_6
• Track 4 : Ximeno_4, Arielagos_4, StrawberryLem_4, FirePit_4, Kels_4, SerialPhiller_4, Eyoseyas_4
• Track 5 : Link_6, Muttlie_6
• Track 6 : Vinye_7
• Track 7 : ElectricPheel_7
• Track 8 : Toulouse_5, Seume_6, Sourignavong_7
• Track 9 : Taj14_6
• Track 10 : Saphira_6, Swenson_6
• Track 11 : KylieMac_7
• Track 12 : MooKitty_4
• Track 13 : Atraxa_4, Sputnik_4
• Track 14 : Adaia_4
• Track 15 : McGonagall_4, Jeanie_4
• Track 16 : Coeur_4
• Track 17 : GRU3_4
• Track 18 : GMA5_4
• Track 19 : Rahul_4
• Track 20 : Schiebs_4
• Track 21 : Emperor_6
• Track 22 : EpicDab_4
• Track 23 : Dirtfootball_4
• Track 24 : SallySpecial_4
• Track 25 : BonaeVitae_4, Naby_4
• Track 26 : Madebyisha_4, OdetoJoy_4
• Track 27 : Livingwater_4, Quaker_4, Bodhi17_4, Sippinontea_4, Wolfpack_4, KayPaulus_4
• Track 28 : Jahseh_4, SeaWolves_4, Majesty_4, Alucard_4, Goobery_4, Picnic_4, Erin_4, Baine_4, Sachet_4, Lola20_4, EdElric_4, LemonPepper_4, Eightball_4, Goulash_4, Aztec_4, DirtPie_4, Gabbspett_4, Gillker_4, Owens_4, Gardevoir_4, Cayde6_4, TeddyBoy_4, Dooby_4, Jannah_4, Dongwon_4, LionelHutz_4, GoldenBlanche_4, Witch_4, Tyrellus_4, Myram_4, Sara_4, JoBros_4, NeumannU_4,

Slentz_4, Yasuo_4, Puddles3_4, Horacetta_4, BinkBonk_4, PaoPu_4, Yubaba_4, BurtonThePup_4, Minima_4, Pondwater_4, Chatham_4, Ciel_4, YertPhresh_4, Octopus_4, Danimal_4, HeadMave_4, BarBear_4, Picconator_4, Scrunchy_4, Duggle_4, Anseraureola_4, ManAs_4
• Track 29 : Luxx_4
• Track 30 : KillerTomato_4, Bri160_4, BoomRoasted_4
• Track 31 : Namsahir_4, PoRanda_4, MirimarMandM_4, Publix_4, Upsilon_4
• Track 32 : Josuke_4, Scamander_4, Avvas_4, SantasSleigh_4, Otwor_4, LaviMo_4, Burgy_4, Grayscar_4, Danno_4, Sage7_4, MasterPitts_4, Rhysand_4, RoscoWindex_4, Aries55_4, Cheesecake_4, Vanisius_4, DaftyDuck_4
• Track 33 : Maneater_4, Charbie_4
• Track 34 : Abelaine_4
• Track 35 : Slizam_4, JooneeDee_4, IzzyPants24_4, Lunatic_4, Rira_4, TomBrady12_4, Trireme_4, Miaurora_4, Niffler_4, TlaliMex_4, Bintii_4, PuffyCat_4, Cazares_4, Stem_4, TinyTruffula_4, MauiIvory_4, Trackstar_4, Nobel_4, Clownery_4, Yami_4
• Track 36 : Leafy_4, MrGreen_4
• Track 37 : JRok_4
• Track 38 : Belthelas_4
• Track 39 : TimoTea_4
• Track 40 : Efeko_5
• Track 41 : Bradley2_4
• Track 42 : Elspeth_4, Ekko14_4, Noelani_4
• Track 43 : BrokMonster_4, McShie_4
• Track 44 : ELee24_4
• Track 45 : Concrete_4
• Track 46 : MelBee03_4, Kevanna_4
• Track 47 : HarperAnne_4
• Track 48 : JaimeB_4, Marichuy_4, Astro16_4, Rhogar_4, Hernandez44_4
• Track 49 : Biscayne_4
• Track 50 : Kaijohn_4
• Track 51 : KyriosFaba_4
• Track 52 : Bullzi2019_4
• Track 53 : Azizam_4, Oaklynn_4
• Track 54 : Jella_4
• Track 55 : Snuffles_5
• Track 56 : VitulaEligans_4, Jerky_4
• Track 57 : Godfather_4, Kojax4_4
• Track 58 : Douggie_4
• Track 59 : Toxicola_4
• Track 60 : Loca_4
• Track 61 : Zahlia_4
• Track 62 : Hulk_4
• Track 63 : CarefulCloud_3
• Track 64 : HorseRider_3
• Track 65 : TailX7_3
• Track 66 : Flashwig_3
• Track 67 : Jalloh_3
• Track 68 : CyranoPS_3
• Track 69 : CabbageMan_4, Pauu_5, LauKoruNamu_5
• Track 70 : Whytu_2
• Track 71 : KNG13_6, Corgi_6, CheeseDanish_6
• Track 72 : BlueFeather_4

• Track 73 : Utopia_2
• Track 74 : Piku_2
• Track 75 : Yavru_2
• Track 76 : Noely_4
• Track 77 : Nebulanyx_6
• Track 78 : WorldChangers_2
• Track 79 : Idaho_4
• Track 80 : Berka_5
• Track 81 : Wobbe_6
• Track 82 : MoRicky_4, Smilerella_4
• Track 83 : BigBoyz_3
• Track 84 : Root_5
• Track 85 : Corndog_34, Krili_31, NiebruSaylor_31, Schuy_33, Murai_32, Shida_32
• Track 86 : Blessica_33, Bora_29, MadKillah_33, Ashwin_33, Zebo_32, JangDynasty_32, YoyoKar_30, KingPhillip3_32, Idergollasper_32, Zakhe101_32, Familton_33, Firecracker_32, Wogge42_31, Dylan_31, Imara_32, FoulBall_32, Catdawg_32, SchoolBus_32, Winget_33, Alkhayr_32, YungJamal_35, TelAviv_29, Vagabond_32
• Track 87 : Vorrps_31, Mori_31, Smooch_34
• Track 88 : Wildflower_32
• Track 89 : Ryadel_35
• Track 90 : Penoan_5
• Track 91 : Ball_4
• Track 92 : Barebow_3
• Track 93 : Bobburn_3
• Track 94 : MooMoo_3
• Track 95 : PensacolaC28_2
• Track 96 : RRH1_04

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

The start number called the most often in the published annotations is 27, it was called in 128 of the 259 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alucard_4, Anseraureola_4, Aries55_4, Avvas_4, Aztec_4, Baine_4, BarBear_4, BinkBonk_4, Bintii_4, Biscayne_4, Bodhi17_4, BonaeVitae_4, BoomRoasted_4, Bradley2_4, Bri160_4, BrokMonster_4, Burgy_4, BurtonThePup_4, Cayde6_4, Cazares_4, Chatham_4, Cheesecake_4, Ciel_4, Clownery_4, Concrete_4, DaftyDuck_4, Danimal_4, Danno_4, DirtPie_4, Dongwon_4, Dooby_4, Duggle_4, ELee24_4, EdElric_4, Efeko_5, Eightball_4, Ekko14_4, Elspeth_4, Erin_4, Gabbspett_4, Gardevoir_4, Gillker_4, GoldenBlanche_4, Goobery_4, Goulash_4, Grayscar_4, HeadMave_4, Horacetta_4, IzzyPants24_4, JRok_4, Jahseh_4, Jannah_4, Jella_4, Jerky_4, JoBros_4, JooneeDee_4, Josuke_4, Kaijohn_4, KayPaulus_4, Kevanna_4, KillerTomato_4, KyriosFaba_4, LaviMo_4, Leafy_4, LemonPepper_4, LionelHutz_4, Livingwater_4, Loca_4, Lola20_4, Lunatic_4, Majesty_4, ManAs_4, MasterPitts_4, MauiIvory_4, McShie_4, MelBee03_4, Miaurora_4, Minima_4, MirimarMandM_4, MrGreen_4, Myram_4, Naby_4, Namsahir_4, NeumannU_4, Niffler_4, Nobel_4, Noelani_4, Octopus_4, Otwor_4, Owens_4, PaoPu_4, Picconator_4, Picnic_4, PoRanda_4, Pondwater_4, Publix_4,

Puddles3_4, PuffyCat_4, Quaker_4, Rhysand_4, Rira_4, RoscoWindex_4, Sachet_4, Sage7_4, SantasSleigh_4, Sara_4, Scamander_4, Scrunchy_4, SeaWolves_4, Sippinontea_4, Slentz_4, Slizam_4, Snuffles_5, Stem_4, TeddyBoy_4, TimoTea_4, TinyTruffula_4, TlaliMex_4, TomBrady12_4, Trackstar_4, Trireme_4, Tyrellus_4, Upsilon_4, Vanisius_4, VitulaEligans_4, Witch_4, Wolfpack_4, Yami_4, Yasuo_4, YertPhresh_4, Yubaba_4, Zahlia_4,

Genes that have the "Most Annotated" start but do not call it:
• Abelaine_4, Astro16_4, Azizam_4, Belthelas_4, Bullzi2019_4, Charbie_4, Douggie_4, Godfather_4, HarperAnne_4, Hernandez44_4, Hulk_4, JaimeB_4, Kojax4_4, Luxx_4, Madebyisha_4, Maneater_4, Marichuy_4, Oaklynn_4, OdetoJoy_4, Rhogar_4, Toxicola_4,

Genes that do not have the "Most Annotated" start:
• Adaia_4, Alkhayr_32, Arby_6, Arielagos_4, Ashwin_33, Atraxa_4, Azathoth_6, Ball_4, Barebow_3, Berka_5, BigBoyz_3, Blair_6, Blessica_33, BlueFeather_4, Bobburn_3, Bora_29, CGermain_6, CabbageMan_4, CarefulCloud_3, Catdawg_32, CheeseDanish_6, Chestnut_6, Coeur_4, Copper_6, Corgi_6, Corndog_34, Courtney3_6, CyranoPS_3, Decurro_6, Dewayne_6, Dirtfootball_4, Dylan_31, ElectricPheel_7, Elkhorn_6, Emperor_6, EpicDab_4, Eyoseyas_4, Familton_33, FirePit_4, Firecracker_32, Flashwig_3, FoulBall_32, GMA5_4, GRU3_4, Guntur_6, HorseRider_3, Hunnie_6, Idaho_4, Idergollasper_32, Imara_32, Inspire2_6, Jalloh_3, JangDynasty_32, Jeanie_4, Jessica_7, KNG13_6, Kels_4, KingPhillip3_32, Krili_31, KylieMac_7, Laila_7, LauKoruNamu_5, Link_6, Lore_6, LouisXIV_6, MadKillah_33, Maggie_6, Mariposa_6, Massimo_6, McGonagall_4, MoRicky_4, Moloch_6, MooKitty_4, MooMoo_3, Mori_31, Murai_32, Muttlie_6, Nebulanyx_6, NiebruSaylor_31, Noely_4, Pauu_5, Penoan_5, PensacolaC28_2, Piku_2, Prospero_6, RRH1_04, Rahul_4, Ronnie_6, Root_5, Ryadel_35, SallySpecial_4, Sandman_6, Saphira_6, Schiebs_4, SchoolBus_32, Schuy_33, SerialPhiller_4, Seume_6, Shida_32, Smilerella_4, Smooch_34, Sourignavong_7, Sputnik_4, StewieGriff_6, Stratus_6, StrawberryLem_4, Swenson_6, TailX7_3, Taj14_6, TelAviv_29, TinoCrisci_6, Toulouse_5, TymAbreu_6, Utopia_2, Vagabond_32, Vinye_7, Vorrps_31, Whytu_2, Wildflower_32, Winget_33, Wobbe_6, Wogge42_31, WorldChangers_2, Ximeno_4, Yank_6, Yavru_2, YoyoKar_30, YungJamal_35, Zakhe101_32, Zebo_32,

Summary by start number:

Start 14:
• Found in 1 of 283 (0.4%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: WorldChangers_2 (FE),

Start 17:
• Found in 56 of 283 (19.8%) of genes in pham
• Manual Annotations of this start: 34 of 259
• Called 66.1% of time when present
• Phage (with cluster) where this start called: Abelaine_4 (EE), Alkhayr_32 (O), Ashwin_33 (O), Blessica_33 (O), Bora_29 (O), Catdawg_32 (O), Corndog_34 (O), Douggie_4 (EE), Dylan_31 (O), Familton_33 (O), Firecracker_32 (O), FoulBall_32 (O), Idergollasper_32 (O), Imara_32 (O), JangDynasty_32 (O), KingPhillip3_32 (O), Krili_31 (O), MadKillah_33 (O), MooMoo_3 (singleton), Mori_31 (O), Murai_32 (O),

NiebruSaylor_31 (O), Ryadel_35 (O), SchoolBus_32 (O), Schuy_33 (O), Shida_32 (O), Smooch_34 (O), TelAviv_29 (O), Vagabond_32 (O), Vorrps_31 (O), Wildflower_32 (O), Winget_33 (O), Wogge42_31 (O), YoyoKar_30 (O), YungJamal_35 (O), Zakhe101_32 (O), Zebo_32 (O),

Start 19:
• Found in 6 of 283 (2.1%) of genes in pham
• Manual Annotations of this start: 4 of 259
• Called 66.7% of time when present
• Phage (with cluster) where this start called: BigBoyz_3 (GH), MoRicky_4 (GH), PensacolaC28_2 (singleton), Smilerella_4 (GH),

Start 20:
• Found in 13 of 283 (4.6%) of genes in pham
• Manual Annotations of this start: 2 of 259
• Called 23.1% of time when present
• Phage (with cluster) where this start called: Barebow_3 (singleton), Bobburn_3 (singleton), Toxicola_4 (EE),

Start 21:
• Found in 47 of 283 (16.6%) of genes in pham
• Manual Annotations of this start: 46 of 259
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arby_6 (AN), Arielagos_4 (AN), Azathoth_6 (AN), Blair_6 (AN), CGermain_6 (AN), Chestnut_6 (AN), Copper_6 (AN), Courtney3_6 (AN), Decurro_6 (AN), Dewayne_6 (AN), ElectricPheel_7 (AN), Elkhorn_6 (AN), Eyoseyas_4 (AN), FirePit_4 (AN), Guntur_6 (AN), Hunnie_6 (AN), Inspire2_6 (AN), Jessica_7 (AN), Kels_4 (AN), KylieMac_7 (AN), Laila_7 (AN), Link_6 (AN), Lore_6 (AN), LouisXIV_6 (AN), Maggie_6 (AN), Mariposa_6 (AN), Massimo_6 (AN), Moloch_6 (AN), Muttlie_6 (AN), Prospero_6 (AN), Ronnie_6 (AN), Sandman_6 (AN), Saphira_6 (AN), SerialPhiller_4 (AN), Seume_6 (AN), Sourignavong_7 (AN), StewieGriff_6 (AN), Stratus_6 (AN), StrawberryLem_4 (AN), Swenson_6 (AN), Taj14_6 (AN), TinoCrisci_6 (AN), Toulouse_5 (AN), TymAbreu_6 (AN), Vinye_7 (AN), Ximeno_4 (AN), Yank_6 (AN),

Start 25:
• Found in 1 of 283 (0.4%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Penoan_5 (UNK),

Start 27:
• Found in 153 of 283 (54.1%) of genes in pham
• Manual Annotations of this start: 128 of 259
• Called 86.3% of time when present
• Phage (with cluster) where this start called: Alucard_4 (EE), Anseraureola_4 (EE), Aries55_4 (EE), Avvas_4 (EE), Aztec_4 (EE), Baine_4 (EE), BarBear_4 (EE), BinkBonk_4 (EE), Bintii_4 (EE), Biscayne_4 (EE), Bodhi17_4 (EE), BonaeVitae_4 (EE), BoomRoasted_4 (EE), Bradley2_4 (EE), Bri160_4 (EE), BrokMonster_4 (EE), Burgy_4 (EE), BurtonThePup_4 (EE), Cayde6_4 (EE), Cazares_4 (EE), Chatham_4 (EE), Cheesecake_4 (EE), Ciel_4 (EE), Clownery_4 (EE), Concrete_4 (EE), DaftyDuck_4 (EE), Danimal_4 (EE), Danno_4 (EE), DirtPie_4 (EE), Dongwon_4 (EE), Dooby_4 (EE), Duggle_4 (EE), ELee24_4 (EE), EdElric_4 (EE), Efeko_5 (EE),

Eightball_4 (EE), Ekko14_4 (EE), Elspeth_4 (EE), Erin_4 (EE), Gabbspett_4 (EE), Gardevoir_4 (EE), Gillker_4 (EE), GoldenBlanche_4 (EE), Goobery_4 (EE), Goulash_4 (EE), Grayscar_4 (EE), HeadMave_4 (EE), Horacetta_4 (EE), IzzyPants24_4 (EE), JRok_4 (EE), Jahseh_4 (EE), Jannah_4 (EE), Jella_4 (EE), Jerky_4 (EE), JoBros_4 (EE), JooneeDee_4 (EE), Josuke_4 (EE), Kaijohn_4 (EE), KayPaulus_4 (EE), Kevanna_4 (EE), KillerTomato_4 (EE), KyriosFaba_4 (EE), LaviMo_4 (EE), Leafy_4 (EE), LemonPepper_4 (EE), LionelHutz_4 (EE), Livingwater_4 (EE), Loca_4 (EE), Lola20_4 (EE), Lunatic_4 (EE), Majesty_4 (EE), ManAs_4 (EE), MasterPitts_4 (EE), MauiIvory_4 (EE), McShie_4 (EE), MelBee03_4 (EE), Miaurora_4 (EE), Minima_4 (EE), MirimarMandM_4 (EE), MrGreen_4 (EE), Myram_4 (EE), Naby_4 (EE), Namsahir_4 (EE), NeumannU_4 (EE), Niffler_4 (EE), Nobel_4 (EE), Noelani_4 (EE), Octopus_4 (EE), Otwor_4 (EE), Owens_4 (EE), PaoPu_4 (EE), Picconator_4 (EE), Picnic_4 (EE), PoRanda_4 (EE), Pondwater_4 (EE), Publix_4 (EE), Puddles3_4 (EE), PuffyCat_4 (EE), Quaker_4 (EE), Rhysand_4 (EE), Rira_4 (EE), RoscoWindex_4 (EE), Sachet_4 (EE), Sage7_4 (EE), SantasSleigh_4 (EE), Sara_4 (EE), Scamander_4 (EE), Scrunchy_4 (EE), SeaWolves_4 (EE), Sippinontea_4 (EE), Slentz_4 (EE), Slizam_4 (EE), Snuffles_5 (EE), Stem_4 (EE), TeddyBoy_4 (EE), TimoTea_4 (EE), TinyTruffula_4 (EE), TlaliMex_4 (EE), TomBrady12_4 (EE), Trackstar_4 (EE), Trireme_4 (EE), Tyrellus_4 (EE), Upsilon_4 (EE), Vanisius_4 (EE), VitulaEligans_4 (EE), Witch_4 (EE), Wolfpack_4 (EE), Yami_4 (EE), Yasuo_4 (EE), YertPhresh_4 (EE), Yubaba_4 (EE), Zahlia_4 (EE),

Start 29:
• Found in 1 of 283 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 259
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Root_5 (JC),

Start 30:
• Found in 7 of 283 (2.5%) of genes in pham
• Manual Annotations of this start: 1 of 259
• Called 57.1% of time when present
• Phage (with cluster) where this start called: Adaia_4 (AX), HorseRider_3 (ER), Jalloh_3 (ER), TailX7_3 (ER),

Start 32:
• Found in 20 of 283 (7.1%) of genes in pham
• Manual Annotations of this start: 10 of 259
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Atraxa_4 (AX), CarefulCloud_3 (ER), Coeur_4 (CW2), CyranoPS_3 (ER), Dirtfootball_4 (DM), Emperor_6 (DM), Flashwig_3 (ER), GMA5_4 (CW2), Jeanie_4 (CW1), McGonagall_4 (CW1), MooKitty_4 (AX), RRH1_04 (singleton), Rahul_4 (CW2), SallySpecial_4 (DM), Sputnik_4 (AX),

Start 34:
• Found in 1 of 283 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 259
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Idaho_4 (FE),

Start 35:

• Found in 5 of 283 (1.8%) of genes in pham
• Manual Annotations of this start: 5 of 259
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Berka_5 (FE), Piku_2 (FE), Utopia_2 (FE), Whytu_2 (FE), Yavru_2 (FE),

Start 37:
• Found in 11 of 283 (3.9%) of genes in pham
• Manual Annotations of this start: 7 of 259
• Called 72.7% of time when present
• Phage (with cluster) where this start called: CabbageMan_4 (FE), CheeseDanish_6 (FE), Corgi_6 (FE), KNG13_6 (FE), LauKoruNamu_5 (FE), Nebulanyx_6 (FE), Noely_4 (FE), Pauu_5 (FE),

Start 40:
• Found in 1 of 283 (0.4%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GRU3_4 (CW2),

Start 41:
• Found in 1 of 283 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 259
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Schiebs_4 (CW3),

Start 43:
• Found in 1 of 283 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 259
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EpicDab_4 (DM),

Start 44:
• Found in 1 of 283 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 259
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlueFeather_4 (FE),

Start 49:
• Found in 10 of 283 (3.5%) of genes in pham
• No Manual Annotations of this start.
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Wobbe_6 (FE),

Start 50:
• Found in 36 of 283 (12.7%) of genes in pham
• No Manual Annotations of this start.
• Called 2.8% of time when present
• Phage (with cluster) where this start called: Ball_4 (singleton),

Start 67:
• Found in 81 of 283 (28.6%) of genes in pham
• Manual Annotations of this start: 2 of 259

• Called 2.5% of time when present
• Phage (with cluster) where this start called: Godfather_4 (EE), Kojax4_4 (EE),

Start 69:
• Found in 158 of 283 (55.8%) of genes in pham
• Manual Annotations of this start: 15 of 259
• Called 10.1% of time when present
• Phage (with cluster) where this start called: Astro16_4 (EE), Azizam_4 (EE), Belthelas_4 (EE), Bullzi2019_4 (EE), Charbie_4 (EE), HarperAnne_4 (EE), Hernandez44_4 (EE), Hulk_4 (EE), JaimeB_4 (EE), Luxx_4 (EE), Madebyisha_4 (EE), Maneater_4 (EE), Marichuy_4 (EE), Oaklynn_4 (EE), OdetoJoy_4 (EE), Rhogar_4 (EE),

Summary by clusters:

There are 14 clusters represented in this pham: singleton, DM, JC, EE, CW3, CW2, O, AN, CW1, FE, AX, UNK, ER, GH,

Info for manual annotations of cluster AN:
•Start number 21 was manually annotated 46 times for cluster AN.

Info for manual annotations of cluster AX:
•Start number 30 was manually annotated 1 time for cluster AX.
•Start number 32 was manually annotated 3 times for cluster AX.

Info for manual annotations of cluster CW1:
•Start number 32 was manually annotated 2 times for cluster CW1.

Info for manual annotations of cluster CW2:
•Start number 32 was manually annotated 2 times for cluster CW2.

Info for manual annotations of cluster CW3:
•Start number 41 was manually annotated 1 time for cluster CW3.

Info for manual annotations of cluster DM:
•Start number 32 was manually annotated 2 times for cluster DM.
•Start number 43 was manually annotated 1 time for cluster DM.

Info for manual annotations of cluster EE:
•Start number 17 was manually annotated 1 time for cluster EE.
•Start number 27 was manually annotated 128 times for cluster EE.
•Start number 67 was manually annotated 2 times for cluster EE.
•Start number 69 was manually annotated 15 times for cluster EE.

Info for manual annotations of cluster ER:
•Start number 32 was manually annotated 1 time for cluster ER.

Info for manual annotations of cluster FE:
•Start number 34 was manually annotated 1 time for cluster FE.
•Start number 35 was manually annotated 5 times for cluster FE.
•Start number 37 was manually annotated 7 times for cluster FE.
•Start number 44 was manually annotated 1 time for cluster FE.

Info for manual annotations of cluster GH:
•Start number 19 was manually annotated 3 times for cluster GH.

Info for manual annotations of cluster JC:
•Start number 29 was manually annotated 1 time for cluster JC.

Info for manual annotations of cluster O:
•Start number 17 was manually annotated 32 times for cluster O.

Gene Information:

Gene: Abelaine_4 Start: 2650, Stop: 3804, Start Num: 17
Candidate Starts for Abelaine_4:
(Start: 17 @2650 has 34 MA's), (Start: 27 @2677 has 128 MA's), (53, 2746), (Start: 67 @2782 has 2 MA's), (Start: 69 @2788 has 15 MA's), (79, 2812), (101, 2887), (135, 2959), (137, 2962), (139, 2968), (158, 3001), (165, 3037), (191, 3130), (193, 3133), (207, 3184), (221, 3262), (224, 3274), (233, 3316), (245, 3364), (249, 3367), (261, 3418), (268, 3448), (276, 3490), (290, 3571), (328, 3721),

Gene: Adaia_4 Start: 2060, Stop: 3190, Start Num: 30
Candidate Starts for Adaia_4:
(Start: 30 @2060 has 1 MA's), (Start: 32 @2069 has 10 MA's), (63, 2144), (Start: 69 @2159 has 15 MA's), (77, 2177), (80, 2183), (89, 2201), (94, 2219), (97, 2234), (109, 2282), (116, 2291), (134, 2339), (146, 2369), (161, 2414), (206, 2576), (211, 2600), (220, 2654), (224, 2669), (228, 2693), (263, 2819), (266, 2840), (270, 2855), (273, 2867), (278, 2900), (286, 2954), (289, 2966), (292, 2978), (310, 3059), (315, 3083), (322, 3110), (336, 3167),

Gene: Alkhayr_32 Start: 15001, Stop: 16230, Start Num: 17
Candidate Starts for Alkhayr_32:
(Start: 17 @15001 has 34 MA's), (50, 15094), (51, 15097), (65, 15139), (97, 15238), (104, 15271), (108, 15283), (118, 15298), (127, 15325), (129, 15334), (160, 15421), (163, 15430), (217, 15661), (236, 15748), (249, 15799), (257, 15835), (265, 15859), (274, 15907), (276, 15922), (293, 16021), (294, 16024), (313, 16105), (319, 16132), (323, 16147), (325, 16150), (334, 16174), (338, 16204), (340, 16225),

Gene: Alucard_4 Start: 2660, Stop: 3787, Start Num: 27
Candidate Starts for Alucard_4:
(Start: 27 @2660 has 128 MA's), (53, 2729), (Start: 69 @2771 has 15 MA's), (79, 2795), (101, 2870), (135, 2942), (137, 2945), (139, 2951), (158, 2984), (165, 3020), (191, 3113), (193, 3116), (207, 3167), (221, 3245), (224, 3257), (233, 3299), (249, 3350), (268, 3431), (276, 3473), (290, 3554), (328, 3704),

Gene: Anseraureola_4 Start: 2683, Stop: 3810, Start Num: 27
Candidate Starts for Anseraureola_4:
(Start: 27 @2683 has 128 MA's), (53, 2752), (Start: 69 @2794 has 15 MA's), (79, 2818), (101, 2893), (135, 2965), (137, 2968), (139, 2974), (158, 3007), (165, 3043), (191, 3136), (193, 3139), (207, 3190), (221, 3268), (224, 3280), (233, 3322), (249, 3373), (268, 3454), (276, 3496), (290, 3577), (328, 3727),

Gene: Arby_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Arby_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054),

(197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Arielagos_4 Start: 2175, Stop: 3320, Start Num: 21
Candidate Starts for Arielagos_4:
(Start: 21 @2175 has 46 MA's), (72, 2304), (94, 2361), (107, 2418), (112, 2427), (143, 2505), (146, 2511), (156, 2535), (163, 2562), (175, 2598), (185, 2649), (200, 2697), (206, 2718), (215, 2760), (220, 2796), (245, 2904), (256, 2940), (274, 3015), (278, 3042), (292, 3120), (297, 3147), (310, 3201), (315, 3225), (329, 3285), (335, 3303),

Gene: Aries55_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Aries55_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Ashwin_33 Start: 15011, Stop: 16240, Start Num: 17
Candidate Starts for Ashwin_33:
(Start: 17 @15011 has 34 MA's), (50, 15104), (51, 15107), (65, 15149), (97, 15248), (104, 15281), (108, 15293), (118, 15308), (127, 15335), (129, 15344), (160, 15431), (163, 15440), (217, 15671), (236, 15758), (249, 15809), (257, 15845), (265, 15869), (274, 15917), (276, 15932), (293, 16031), (294, 16034), (313, 16115), (319, 16142), (323, 16157), (325, 16160), (334, 16184), (338, 16214), (340, 16235),

Gene: Astro16_4 Start: 2782, Stop: 3798, Start Num: 69
Candidate Starts for Astro16_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Atraxa_4 Start: 2128, Stop: 3240, Start Num: 32
Candidate Starts for Atraxa_4:
(Start: 32 @2128 has 10 MA's), (55, 2170), (Start: 67 @2209 has 2 MA's), (Start: 69 @2215 has 15 MA's), (80, 2239), (89, 2257), (94, 2275), (102, 2311), (116, 2347), (156, 2449), (174, 2509), (184, 2545), (199, 2605), (207, 2632), (210, 2650), (228, 2746), (245, 2815), (263, 2872), (273, 2920), (286, 3007), (292, 3031), (298, 3067), (310, 3112), (315, 3136),

Gene: Avvas_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Avvas_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Azathoth_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Azathoth_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Azizam_4 Start: 2770, Stop: 3786, Start Num: 69

Candidate Starts for Azizam_4:
(Start: 20 @2644 has 2 MA's), (Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (179, 3067), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (245, 3346), (249, 3349), (261, 3400), (268, 3430), (276, 3472), (281, 3514), (290, 3553), (328, 3703),

Gene: Aztec_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Aztec_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Baine_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for Baine_4:
(Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: Ball_4 Start: 2192, Stop: 3328, Start Num: 50
Candidate Starts for Ball_4:
(38, 2159), (50, 2192), (60, 2213), (76, 2261), (83, 2279), (88, 2288), (120, 2384), (140, 2435), (177, 2558), (191, 2621), (193, 2624), (209, 2690), (212, 2702), (231, 2798), (234, 2810), (236, 2813), (240, 2837), (245, 2852), (259, 2900), (304, 3119), (315, 3167), (337, 3242), (339, 3290),

Gene: BarBear_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for BarBear_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Barebow_3 Start: 1899, Stop: 3107, Start Num: 20
Candidate Starts for Barebow_3:
(Start: 20 @1899 has 2 MA's), (48, 1971), (81, 2049), (97, 2103), (121, 2166), (135, 2196), (169, 2289), (191, 2373), (198, 2397), (231, 2550), (252, 2616), (272, 2700), (286, 2790), (333, 2970),

Gene: Belthelas_4 Start: 2821, Stop: 3837, Start Num: 69
Candidate Starts for Belthelas_4:
(Start: 27 @2710 has 128 MA's), (53, 2779), (Start: 67 @2815 has 2 MA's), (Start: 69 @2821 has 15 MA's), (79, 2845), (101, 2920), (135, 2992), (137, 2995), (139, 3001), (158, 3034), (165, 3070), (191, 3163), (193, 3166), (207, 3217), (221, 3295), (224, 3307), (233, 3349), (245, 3397), (249, 3400), (261, 3451), (268, 3481), (276, 3523), (290, 3604), (328, 3754),

Gene: Berka_5 Start: 2445, Stop: 3521, Start Num: 35
Candidate Starts for Berka_5:
(Start: 35 @2445 has 5 MA's), (87, 2589), (94, 2619), (96, 2625), (97, 2634), (148, 2772), (157, 2793), (171, 2856), (223, 3042), (224, 3048), (237, 3096), (247, 3141), (263, 3201), (267, 3225), (288, 3339), (291, 3351),

Gene: BigBoyz_3 Start: 1897, Stop: 3003, Start Num: 19
Candidate Starts for BigBoyz_3:
(7, 1729), (Start: 19 @1897 has 4 MA's), (76, 2053), (95, 2104), (102, 2134), (115, 2161), (152, 2257), (155, 2263), (173, 2341), (205, 2446), (250, 2644), (255, 2659), (279, 2776), (284, 2809), (287, 2824), (293, 2851), (309, 2914),

Gene: BinkBonk_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for BinkBonk_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Bintii_4 Start: 2689, Stop: 3816, Start Num: 27
Candidate Starts for Bintii_4:
(Start: 27 @2689 has 128 MA's), (53, 2758), (Start: 67 @2794 has 2 MA's), (Start: 69 @2800 has 15 MA's), (79, 2824), (101, 2899), (135, 2971), (137, 2974), (139, 2980), (158, 3013), (165, 3049), (191, 3142), (193, 3145), (207, 3196), (221, 3274), (224, 3286), (233, 3328), (249, 3379), (268, 3460), (276, 3502), (286, 3568), (290, 3583), (328, 3733),

Gene: Biscayne_4 Start: 2687, Stop: 3844, Start Num: 27
Candidate Starts for Biscayne_4:
(Start: 17 @2660 has 34 MA's), (Start: 27 @2687 has 128 MA's), (53, 2756), (Start: 67 @2792 has 2 MA's), (Start: 69 @2798 has 15 MA's), (79, 2822), (101, 2897), (135, 2969), (137, 2972), (139, 2978), (158, 3011), (162, 3032), (165, 3047), (170, 3065), (191, 3140), (193, 3143), (207, 3194), (221, 3272), (224, 3284), (233, 3326), (245, 3374), (249, 3377), (261, 3428), (268, 3458), (276, 3500), (286, 3566), (290, 3581), (328, 3731),

Gene: Blair_6 Start: 2549, Stop: 3709, Start Num: 21
Candidate Starts for Blair_6:
(Start: 21 @2549 has 46 MA's), (80, 2708), (82, 2717), (94, 2750), (107, 2807), (124, 2837), (131, 2861), (146, 2900), (149, 2909), (156, 2924), (178, 2999), (186, 3041), (192, 3056), (197, 3077), (198, 3080), (200, 3086), (206, 3107), (224, 3200), (245, 3293), (256, 3329), (266, 3371), (269, 3380), (297, 3536), (299, 3548), (310, 3590), (315, 3614), (329, 3674), (335, 3692),

Gene: Blessica_33 Start: 15402, Stop: 16631, Start Num: 17
Candidate Starts for Blessica_33:
(Start: 17 @15402 has 34 MA's), (50, 15495), (51, 15498), (65, 15540), (97, 15639), (104, 15672), (108, 15684), (118, 15699), (127, 15726), (129, 15735), (160, 15822), (163, 15831), (217, 16062), (236, 16149), (249, 16200), (257, 16236), (265, 16260), (274, 16308), (276, 16323), (293, 16422), (294, 16425), (313, 16506), (319, 16533), (323, 16548), (325, 16551), (334, 16575), (338, 16605), (340, 16626),

Gene: BlueFeather_4 Start: 2400, Stop: 3476, Start Num: 44
Candidate Starts for BlueFeather_4:
(Start: 37 @2385 has 7 MA's), (Start: 44 @2400 has 1 MA's), (46, 2409), (54, 2430), (Start: 67 @2472 has 2 MA's), (73, 2490), (93, 2544), (97, 2571), (99, 2583), (104, 2604), (142, 2703), (154, 2730), (159, 2745), (164, 2769), (171, 2799), (180, 2832), (190, 2859), (196, 2880), (197, 2883), (215, 2955), (222, 2997), (242, 3075), (291, 3309), (298, 3351), (304, 3372),

Gene: Bobburn_3 Start: 1918, Stop: 3156, Start Num: 20
Candidate Starts for Bobburn_3:
(2, 1711), (13, 1864), (18, 1912), (Start: 20 @1918 has 2 MA's), (39, 1972), (Start: 67 @2041 has 2 MA's), (73, 2059), (119, 2185), (164, 2296), (181, 2359), (201, 2434), (218, 2512), (221, 2533), (224, 2545), (227, 2566), (233, 2587), (261, 2728), (270, 2767), (276, 2800), (277, 2806), (290, 2881), (293, 2899), (295, 2905),

Gene: Bodhi17_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for Bodhi17_4:

(Start: 17 @2629 has 34 MA's), (Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 67 @2761 has 2 MA's), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (179, 3064), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: BonaeVitae_4 Start: 2373, Stop: 3533, Start Num: 27
Candidate Starts for BonaeVitae_4:
(Start: 19 @2355 has 4 MA's), (24, 2364), (Start: 27 @2373 has 128 MA's), (Start: 69 @2484 has 15 MA's), (79, 2508), (103, 2586), (135, 2655), (139, 2664), (158, 2697), (179, 2781), (193, 2829), (221, 2958), (224, 2970), (231, 3003), (243, 3057), (249, 3063), (261, 3114), (276, 3186), (286, 3252), (290, 3267), (326, 3411), (328, 3417),

Gene: BoomRoasted_4 Start: 2710, Stop: 3837, Start Num: 27
Candidate Starts for BoomRoasted_4:
(Start: 17 @2683 has 34 MA's), (Start: 27 @2710 has 128 MA's), (53, 2779), (Start: 67 @2815 has 2 MA's), (Start: 69 @2821 has 15 MA's), (79, 2845), (101, 2920), (135, 2992), (137, 2995), (139, 3001), (158, 3034), (165, 3070), (179, 3118), (191, 3163), (193, 3166), (207, 3217), (221, 3295), (224, 3307), (233, 3349), (245, 3397), (249, 3400), (261, 3451), (268, 3481), (276, 3523), (290, 3604), (328, 3754),

Gene: Bora_29 Start: 14464, Stop: 15693, Start Num: 17
Candidate Starts for Bora_29:
(Start: 17 @14464 has 34 MA's), (50, 14557), (51, 14560), (65, 14602), (97, 14701), (104, 14734), (108, 14746), (118, 14761), (127, 14788), (129, 14797), (160, 14884), (163, 14893), (217, 15124), (236, 15211), (249, 15262), (257, 15298), (265, 15322), (274, 15370), (276, 15385), (293, 15484), (294, 15487), (313, 15568), (319, 15595), (323, 15610), (325, 15613), (334, 15637), (338, 15667), (340, 15688),

Gene: Bradley2_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Bradley2_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (106, 2887), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Bri160_4 Start: 2710, Stop: 3837, Start Num: 27
Candidate Starts for Bri160_4:
(Start: 17 @2683 has 34 MA's), (Start: 27 @2710 has 128 MA's), (53, 2779), (Start: 67 @2815 has 2 MA's), (Start: 69 @2821 has 15 MA's), (79, 2845), (101, 2920), (135, 2992), (137, 2995), (139, 3001), (158, 3034), (165, 3070), (179, 3118), (191, 3163), (193, 3166), (207, 3217), (221, 3295), (224, 3307), (233, 3349), (245, 3397), (249, 3400), (261, 3451), (268, 3481), (276, 3523), (290, 3604), (328, 3754),

Gene: BrokMonster_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for BrokMonster_4:
(Start: 20 @2641 has 2 MA's), (Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (179, 3064), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (245, 3343), (249, 3346), (268, 3427), (276, 3469), (281, 3511), (290, 3550), (328, 3700),

Gene: Bullzi2019_4 Start: 2791, Stop: 3807, Start Num: 69
Candidate Starts for Bullzi2019_4:
(Start: 27 @2680 has 128 MA's), (53, 2749), (Start: 67 @2785 has 2 MA's), (Start: 69 @2791 has 15 MA's), (79, 2815), (101, 2890), (135, 2962), (137, 2965), (139, 2971), (158, 3004), (165, 3040), (191, 3133), (193, 3136), (207, 3187), (221, 3265), (224, 3277), (233, 3319), (249, 3370), (268, 3451), (276,

3493), (286, 3559), (290, 3574), (328, 3724),

Gene: Burgy_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Burgy_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: BurtonThePup_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for BurtonThePup_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: CGermain_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for CGermain_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: CabbageMan_4 Start: 2437, Stop: 3570, Start Num: 37
Candidate Starts for CabbageMan_4:
(Start: 37 @2437 has 7 MA's), (49, 2470), (Start: 67 @2521 has 2 MA's), (90, 2584), (92, 2590), (97, 2617), (99, 2629), (133, 2716), (141, 2737), (145, 2749), (150, 2761), (173, 2845), (176, 2854), (177, 2860), (185, 2905), (186, 2908), (203, 2962), (220, 3052), (223, 3061), (226, 3073), (247, 3190), (248, 3196), (251, 3211), (254, 3223), (263, 3250), (269, 3280), (270, 3286), (275, 3316), (298, 3442), (304, 3463), (306, 3472), (325, 3553),

Gene: CarefulCloud_3 Start: 1864, Stop: 2898, Start Num: 32
Candidate Starts for CarefulCloud_3:
(Start: 30 @1855 has 1 MA's), (31, 1858), (Start: 32 @1864 has 10 MA's), (84, 1990), (94, 2014), (103, 2053), (146, 2164), (155, 2185), (199, 2338), (207, 2365), (229, 2479), (263, 2605), (270, 2641), (273, 2653), (278, 2686), (284, 2728), (301, 2809), (314, 2860),

Gene: Catdawg_32 Start: 15091, Stop: 16320, Start Num: 17
Candidate Starts for Catdawg_32:
(Start: 17 @15091 has 34 MA's), (50, 15184), (51, 15187), (65, 15229), (97, 15328), (104, 15361), (108, 15373), (118, 15388), (127, 15415), (129, 15424), (160, 15511), (163, 15520), (217, 15751), (236, 15838), (249, 15889), (257, 15925), (265, 15949), (274, 15997), (276, 16012), (293, 16111), (294, 16114), (313, 16195), (319, 16222), (323, 16237), (325, 16240), (334, 16264), (338, 16294), (340, 16315),

Gene: Cayde6_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for Cayde6_4:
(Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: Cazares_4 Start: 2647, Stop: 3774, Start Num: 27
Candidate Starts for Cazares_4:

(Start: 27 @2647 has 128 MA's), (53, 2716), (Start: 67 @2752 has 2 MA's), (Start: 69 @2758 has 15 MA's), (79, 2782), (101, 2857), (135, 2929), (137, 2932), (139, 2938), (158, 2971), (165, 3007), (191, 3100), (193, 3103), (207, 3154), (221, 3232), (224, 3244), (233, 3286), (249, 3337), (268, 3418), (276, 3460), (286, 3526), (290, 3541), (328, 3691),

Gene: Charbie_4 Start: 2758, Stop: 3774, Start Num: 69
Candidate Starts for Charbie_4:
(Start: 27 @2647 has 128 MA's), (53, 2716), (Start: 69 @2758 has 15 MA's), (79, 2782), (101, 2857), (135, 2929), (137, 2932), (139, 2938), (158, 2971), (165, 3007), (191, 3100), (193, 3103), (207, 3154), (221, 3232), (224, 3244), (233, 3286), (249, 3337), (261, 3388), (268, 3418), (276, 3460), (290, 3541), (328, 3691),

Gene: Chatham_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Chatham_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: CheeseDanish_6 Start: 2604, Stop: 3737, Start Num: 37
Candidate Starts for CheeseDanish_6:
(Start: 37 @2604 has 7 MA's), (49, 2637), (Start: 67 @2688 has 2 MA's), (90, 2751), (92, 2757), (97, 2784), (99, 2796), (133, 2883), (141, 2904), (145, 2916), (150, 2928), (173, 3012), (176, 3021), (177, 3027), (185, 3072), (186, 3075), (203, 3129), (220, 3219), (223, 3228), (226, 3240), (247, 3357), (251, 3378), (254, 3390), (263, 3417), (269, 3447), (270, 3453), (275, 3483), (298, 3609), (304, 3630), (306, 3639), (325, 3720),

Gene: Cheesecake_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Cheesecake_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Chestnut_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Chestnut_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Ciel_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Ciel_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Clownery_4 Start: 2764, Stop: 3891, Start Num: 27
Candidate Starts for Clownery_4:
(Start: 27 @2764 has 128 MA's), (53, 2833), (Start: 67 @2869 has 2 MA's), (Start: 69 @2875 has 15 MA's), (79, 2899), (101, 2974), (135, 3046), (137, 3049), (139, 3055), (158, 3088), (165, 3124), (191, 3217), (193, 3220), (207, 3271), (221, 3349), (224, 3361), (233, 3403), (249, 3454), (268, 3535), (276, 3577), (286, 3643), (290, 3658), (328, 3808),

Gene: Coeur_4 Start: 2156, Stop: 3262, Start Num: 32
Candidate Starts for Coeur_4:
(Start: 32 @2156 has 10 MA's), (47, 2192), (89, 2294), (94, 2312), (96, 2318), (97, 2327), (146, 2462), (163, 2513), (167, 2534), (168, 2537), (192, 2636), (198, 2660), (238, 2843), (274, 2984), (292, 3089), (298, 3125), (299, 3128), (309, 3167),

Gene: Concrete_4 Start: 2710, Stop: 3837, Start Num: 27
Candidate Starts for Concrete_4:
(Start: 17 @2683 has 34 MA's), (Start: 27 @2710 has 128 MA's), (53, 2779), (Start: 69 @2821 has 15 MA's), (79, 2845), (101, 2920), (135, 2992), (137, 2995), (139, 3001), (158, 3034), (165, 3070), (191, 3163), (193, 3166), (207, 3217), (221, 3295), (224, 3307), (233, 3349), (245, 3397), (249, 3400), (261, 3451), (268, 3481), (276, 3523), (290, 3604), (328, 3754),

Gene: Copper_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Copper_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Corgi_6 Start: 2604, Stop: 3737, Start Num: 37
Candidate Starts for Corgi_6:
(Start: 37 @2604 has 7 MA's), (49, 2637), (Start: 67 @2688 has 2 MA's), (90, 2751), (92, 2757), (97, 2784), (99, 2796), (133, 2883), (141, 2904), (145, 2916), (150, 2928), (173, 3012), (176, 3021), (177, 3027), (185, 3072), (186, 3075), (203, 3129), (220, 3219), (223, 3228), (226, 3240), (247, 3357), (251, 3378), (254, 3390), (263, 3417), (269, 3447), (270, 3453), (275, 3483), (298, 3609), (304, 3630), (306, 3639), (325, 3720),

Gene: Corndog_34 Start: 15549, Stop: 16778, Start Num: 17
Candidate Starts for Corndog_34:
(Start: 17 @15549 has 34 MA's), (50, 15642), (51, 15645), (65, 15687), (97, 15786), (104, 15819), (105, 15822), (108, 15831), (118, 15846), (127, 15873), (129, 15882), (160, 15969), (163, 15978), (217, 16209), (236, 16296), (249, 16347), (257, 16383), (265, 16407), (274, 16455), (293, 16569), (294, 16572), (313, 16653), (319, 16680), (323, 16695), (325, 16698), (334, 16722), (338, 16752), (340, 16773),

Gene: Courtney3_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Courtney3_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: CyranoPS_3 Start: 1864, Stop: 2898, Start Num: 32
Candidate Starts for CyranoPS_3:
(Start: 30 @1855 has 1 MA's), (31, 1858), (Start: 32 @1864 has 10 MA's), (84, 1990), (94, 2014), (103, 2053), (146, 2164), (155, 2185), (199, 2338), (207, 2365), (229, 2479), (234, 2503), (253, 2569), (263, 2605), (270, 2641), (273, 2653), (284, 2728), (298, 2800), (314, 2860),

Gene: DaftyDuck_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for DaftyDuck_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191,

3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Danimal_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Danimal_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Danno_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Danno_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Decurro_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Decurro_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (75, 2697), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (178, 2997), (186, 3039), (192, 3054), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Dewayne_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Dewayne_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: DirtPie_4 Start: 2764, Stop: 3891, Start Num: 27
Candidate Starts for DirtPie_4:
(Start: 27 @2764 has 128 MA's), (53, 2833), (Start: 69 @2875 has 15 MA's), (79, 2899), (101, 2974), (135, 3046), (137, 3049), (139, 3055), (158, 3088), (165, 3124), (191, 3217), (193, 3220), (207, 3271), (221, 3349), (224, 3361), (233, 3403), (249, 3454), (268, 3535), (276, 3577), (290, 3658), (328, 3808),

Gene: Dirtfootball_4 Start: 2124, Stop: 3284, Start Num: 32
Candidate Starts for Dirtfootball_4:
(4, 1908), (5, 1917), (8, 1926), (Start: 32 @2124 has 10 MA's), (47, 2160), (56, 2181), (70, 2229), (78, 2244), (94, 2289), (96, 2295), (97, 2304), (109, 2352), (128, 2391), (146, 2436), (147, 2439), (167, 2508), (172, 2526), (197, 2616), (211, 2670), (214, 2685), (224, 2739), (234, 2787), (236, 2790), (245, 2832), (275, 2955), (292, 3048), (293, 3057), (296, 3069), (297, 3075),

Gene: Dongwon_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Dongwon_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Dooby_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Dooby_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166),

(221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Douggie_4 Start: 2629, Stop: 3783, Start Num: 17
Candidate Starts for Douggie_4:
(Start: 17 @2629 has 34 MA's), (Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 67 @2761 has 2 MA's), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: Duggle_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Duggle_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Dylan_31 Start: 14816, Stop: 16045, Start Num: 17
Candidate Starts for Dylan_31:
(Start: 17 @14816 has 34 MA's), (50, 14909), (51, 14912), (65, 14954), (97, 15053), (104, 15086), (108, 15098), (118, 15113), (127, 15140), (129, 15149), (160, 15236), (163, 15245), (217, 15476), (236, 15563), (249, 15614), (257, 15650), (265, 15674), (274, 15722), (276, 15737), (293, 15836), (294, 15839), (313, 15920), (319, 15947), (323, 15962), (325, 15965), (334, 15989), (338, 16019), (340, 16040),

Gene: ELee24_4 Start: 2719, Stop: 3840, Start Num: 27
Candidate Starts for ELee24_4:
(Start: 27 @2719 has 128 MA's), (53, 2788), (Start: 67 @2824 has 2 MA's), (Start: 69 @2830 has 15 MA's), (79, 2854), (101, 2929), (135, 3001), (137, 3004), (139, 3010), (158, 3043), (165, 3079), (191, 3172), (193, 3175), (207, 3226), (221, 3304), (224, 3316), (249, 3409), (261, 3460), (268, 3490), (276, 3532), (290, 3613), (328, 3763),

Gene: EdElric_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for EdElric_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Efeko_5 Start: 2520, Stop: 3692, Start Num: 27
Candidate Starts for Efeko_5:
(22, 2508), (Start: 27 @2520 has 128 MA's), (53, 2592), (57, 2598), (79, 2658), (135, 2805), (139, 2814), (166, 2886), (179, 2931), (193, 2979), (221, 3108), (245, 3210), (249, 3213), (268, 3294), (276, 3336), (290, 3417), (326, 3561), (328, 3567),

Gene: Eightball_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Eightball_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Ekko14_4 Start: 2647, Stop: 3774, Start Num: 27
Candidate Starts for Ekko14_4:
(Start: 27 @2647 has 128 MA's), (53, 2716), (Start: 67 @2752 has 2 MA's), (Start: 69 @2758 has 15 MA's), (79, 2782), (101, 2857), (135, 2929), (137, 2932), (139, 2938), (158, 2971), (165, 3007), (191, 3100), (193, 3103), (207, 3154), (221, 3232), (224, 3244), (233, 3286), (249, 3337), (261, 3388), (268,

3418), (276, 3460), (286, 3526), (290, 3541), (328, 3691),

Gene: ElectricPheel_7 Start: 2623, Stop: 3783, Start Num: 21
Candidate Starts for ElectricPheel_7:
(Start: 21 @2623 has 46 MA's), (80, 2782), (82, 2791), (94, 2824), (107, 2881), (124, 2911), (131, 2935), (146, 2974), (149, 2983), (156, 2998), (178, 3073), (186, 3115), (192, 3130), (197, 3151), (198, 3154), (200, 3160), (224, 3274), (256, 3403), (266, 3445), (269, 3454), (297, 3610), (299, 3622), (310, 3664), (315, 3688), (329, 3748), (335, 3766),

Gene: Elkhorn_6 Start: 2549, Stop: 3709, Start Num: 21
Candidate Starts for Elkhorn_6:
(Start: 21 @2549 has 46 MA's), (80, 2708), (82, 2717), (94, 2750), (107, 2807), (124, 2837), (131, 2861), (146, 2900), (149, 2909), (156, 2924), (178, 2999), (186, 3041), (192, 3056), (197, 3077), (198, 3080), (200, 3086), (206, 3107), (224, 3200), (245, 3293), (256, 3329), (266, 3371), (269, 3380), (297, 3536), (299, 3548), (310, 3590), (315, 3614), (329, 3674), (335, 3692),

Gene: Elspeth_4 Start: 2647, Stop: 3774, Start Num: 27
Candidate Starts for Elspeth_4:
(Start: 27 @2647 has 128 MA's), (53, 2716), (Start: 67 @2752 has 2 MA's), (Start: 69 @2758 has 15 MA's), (79, 2782), (101, 2857), (135, 2929), (137, 2932), (139, 2938), (158, 2971), (165, 3007), (191, 3100), (193, 3103), (207, 3154), (221, 3232), (224, 3244), (233, 3286), (249, 3337), (261, 3388), (268, 3418), (276, 3460), (286, 3526), (290, 3541), (328, 3691),

Gene: Emperor_6 Start: 3262, Stop: 4419, Start Num: 32
Candidate Starts for Emperor_6:
(3, 3034), (6, 3055), (9, 3064), (16, 3190), (Start: 32 @3262 has 10 MA's), (36, 3271), (45, 3289), (47, 3298), (56, 3319), (94, 3427), (96, 3433), (97, 3442), (114, 3496), (156, 3598), (168, 3649), (172, 3667), (188, 3724), (194, 3739), (197, 3754), (214, 3823), (245, 3970), (272, 4072), (275, 4093), (292, 4186), (297, 4213),

Gene: EpicDab_4 Start: 2166, Stop: 3242, Start Num: 43
Candidate Starts for EpicDab_4:
(1, 1884), (23, 2109), (Start: 43 @2166 has 1 MA's), (94, 2313), (116, 2385), (126, 2406), (146, 2460), (147, 2463), (168, 2535), (172, 2553), (174, 2559), (197, 2628), (199, 2634), (219, 2724), (229, 2775), (254, 2871), (280, 2997), (284, 3024), (292, 3060), (299, 3099), (330, 3225), (331, 3228),

Gene: Erin_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Erin_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Eyoseyas_4 Start: 2175, Stop: 3320, Start Num: 21
Candidate Starts for Eyoseyas_4:
(Start: 21 @2175 has 46 MA's), (72, 2304), (94, 2361), (107, 2418), (112, 2427), (143, 2505), (146, 2511), (156, 2535), (163, 2562), (175, 2598), (185, 2649), (200, 2697), (206, 2718), (215, 2760), (220, 2796), (245, 2904), (256, 2940), (274, 3015), (278, 3042), (292, 3120), (297, 3147), (310, 3201), (315, 3225), (329, 3285), (335, 3303),

Gene: Familton_33 Start: 15095, Stop: 16324, Start Num: 17
Candidate Starts for Familton_33:
(Start: 17 @15095 has 34 MA's), (50, 15188), (51, 15191), (65, 15233), (97, 15332), (104, 15365), (108, 15377), (118, 15392), (127, 15419), (129, 15428), (160, 15515), (163, 15524), (217, 15755),

(236, 15842), (249, 15893), (257, 15929), (265, 15953), (274, 16001), (276, 16016), (293, 16115), (294, 16118), (313, 16199), (319, 16226), (323, 16241), (325, 16244), (334, 16268), (338, 16298), (340, 16319),

Gene: FirePit_4 Start: 2175, Stop: 3320, Start Num: 21
Candidate Starts for FirePit_4:
(Start: 21 @2175 has 46 MA's), (72, 2304), (94, 2361), (107, 2418), (112, 2427), (143, 2505), (146, 2511), (156, 2535), (163, 2562), (175, 2598), (185, 2649), (200, 2697), (206, 2718), (215, 2760), (220, 2796), (245, 2904), (256, 2940), (274, 3015), (278, 3042), (292, 3120), (297, 3147), (310, 3201), (315, 3225), (329, 3285), (335, 3303),

Gene: Firecracker_32 Start: 14714, Stop: 15943, Start Num: 17
Candidate Starts for Firecracker_32:
(Start: 17 @14714 has 34 MA's), (50, 14807), (51, 14810), (65, 14852), (97, 14951), (104, 14984), (108, 14996), (118, 15011), (127, 15038), (129, 15047), (160, 15134), (163, 15143), (217, 15374), (236, 15461), (249, 15512), (257, 15548), (265, 15572), (274, 15620), (276, 15635), (293, 15734), (294, 15737), (313, 15818), (319, 15845), (323, 15860), (325, 15863), (334, 15887), (338, 15917), (340, 15938),

Gene: Flashwig_3 Start: 1864, Stop: 2898, Start Num: 32
Candidate Starts for Flashwig_3:
(Start: 30 @1855 has 1 MA's), (31, 1858), (Start: 32 @1864 has 10 MA's), (84, 1990), (94, 2014), (103, 2053), (146, 2164), (155, 2185), (192, 2311), (207, 2365), (229, 2479), (253, 2569), (263, 2605), (270, 2641), (273, 2653), (278, 2686), (284, 2728), (301, 2809), (314, 2860),

Gene: FoulBall_32 Start: 15089, Stop: 16318, Start Num: 17
Candidate Starts for FoulBall_32:
(Start: 17 @15089 has 34 MA's), (50, 15182), (51, 15185), (65, 15227), (97, 15326), (104, 15359), (108, 15371), (118, 15386), (127, 15413), (129, 15422), (160, 15509), (163, 15518), (217, 15749), (236, 15836), (249, 15887), (257, 15923), (265, 15947), (274, 15995), (276, 16010), (293, 16109), (294, 16112), (313, 16193), (319, 16220), (323, 16235), (325, 16238), (334, 16262), (338, 16292), (340, 16313),

Gene: GMA5_4 Start: 2108, Stop: 3199, Start Num: 32
Candidate Starts for GMA5_4:
(Start: 32 @2108 has 10 MA's), (94, 2267), (110, 2330), (128, 2372), (146, 2417), (147, 2420), (155, 2438), (156, 2441), (168, 2492), (207, 2633), (234, 2771), (245, 2816), (263, 2873), (270, 2909), (292, 3032), (297, 3059), (332, 3188),

Gene: GRU3_4 Start: 2171, Stop: 3247, Start Num: 40
Candidate Starts for GRU3_4:
(Start: 32 @2153 has 10 MA's), (40, 2171), (59, 2213), (66, 2240), (94, 2309), (138, 2441), (146, 2459), (155, 2480), (234, 2813), (245, 2858), (272, 2960), (292, 3074), (297, 3101), (299, 3113), (304, 3131), (332, 3236),

Gene: Gabbspett_4 Start: 2761, Stop: 3888, Start Num: 27
Candidate Starts for Gabbspett_4:
(Start: 27 @2761 has 128 MA's), (53, 2830), (Start: 69 @2872 has 15 MA's), (79, 2896), (101, 2971), (135, 3043), (137, 3046), (139, 3052), (158, 3085), (165, 3121), (191, 3214), (193, 3217), (207, 3268), (221, 3346), (224, 3358), (233, 3400), (249, 3451), (268, 3532), (276, 3574), (290, 3655), (328, 3805),

Gene: Gardevoir_4 Start: 2660, Stop: 3787, Start Num: 27
Candidate Starts for Gardevoir_4:

(Start: 27 @2660 has 128 MA's), (53, 2729), (Start: 69 @2771 has 15 MA's), (79, 2795), (101, 2870), (135, 2942), (137, 2945), (139, 2951), (158, 2984), (165, 3020), (191, 3113), (193, 3116), (207, 3167), (221, 3245), (224, 3257), (233, 3299), (249, 3350), (268, 3431), (276, 3473), (290, 3554), (328, 3704),

Gene: Gillker_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Gillker_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Godfather_4 Start: 2776, Stop: 3798, Start Num: 67
Candidate Starts for Godfather_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: GoldenBlanche_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for GoldenBlanche_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Goobery_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Goobery_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Goulash_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Goulash_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Grayscar_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Grayscar_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Guntur_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Guntur_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: HarperAnne_4 Start: 2758, Stop: 3774, Start Num: 69
Candidate Starts for HarperAnne_4:
(Start: 27 @2647 has 128 MA's), (53, 2716), (Start: 67 @2752 has 2 MA's), (Start: 69 @2758 has 15 MA's), (79, 2782), (101, 2857), (135, 2929), (137, 2932), (139, 2938), (158, 2971), (165, 3007), (191,

3100), (193, 3103), (207, 3154), (221, 3232), (224, 3244), (233, 3286), (249, 3337), (261, 3388), (268, 3418), (276, 3460), (286, 3526), (290, 3541), (328, 3691),

Gene: HeadMave_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for HeadMave_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Hernandez44_4 Start: 2872, Stop: 3888, Start Num: 69
Candidate Starts for Hernandez44_4:
(Start: 27 @2761 has 128 MA's), (53, 2830), (Start: 69 @2872 has 15 MA's), (79, 2896), (101, 2971), (135, 3043), (137, 3046), (139, 3052), (158, 3085), (165, 3121), (191, 3214), (193, 3217), (207, 3268), (221, 3346), (224, 3358), (233, 3400), (249, 3451), (268, 3532), (276, 3574), (290, 3655), (328, 3805),

Gene: Horacetta_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Horacetta_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: HorseRider_3 Start: 1855, Stop: 2898, Start Num: 30
Candidate Starts for HorseRider_3:
(Start: 30 @1855 has 1 MA's), (31, 1858), (Start: 32 @1864 has 10 MA's), (84, 1990), (94, 2014), (103, 2053), (146, 2164), (155, 2185), (197, 2332), (199, 2338), (207, 2365), (229, 2479), (234, 2503), (253, 2569), (263, 2605), (270, 2641), (273, 2653), (278, 2686), (284, 2728), (298, 2800), (301, 2809), (314, 2860),

Gene: Hulk_4 Start: 2782, Stop: 3798, Start Num: 69
Candidate Starts for Hulk_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (245, 3358), (249, 3361), (261, 3412), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Hunnie_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Hunnie_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Idaho_4 Start: 2408, Stop: 3580, Start Num: 34
Candidate Starts for Idaho_4:
(Start: 34 @2408 has 1 MA's), (50, 2453), (74, 2519), (99, 2609), (104, 2630), (107, 2639), (144, 2726), (150, 2741), (173, 2825), (186, 2888), (190, 2900), (195, 2912), (203, 2942), (220, 3032), (222, 3038), (223, 3041), (241, 3140), (246, 3155), (247, 3170), (251, 3191), (253, 3197), (263, 3230), (264, 3233), (269, 3260), (270, 3266), (274, 3284), (275, 3296), (289, 3374), (291, 3380), (297, 3413), (298, 3422), (304, 3443), (309, 3464), (311, 3473),

Gene: Idergollasper_32 Start: 15089, Stop: 16318, Start Num: 17
Candidate Starts for Idergollasper_32:

(Start: 17 @15089 has 34 MA's), (50, 15182), (51, 15185), (65, 15227), (97, 15326), (104, 15359), (108, 15371), (118, 15386), (127, 15413), (129, 15422), (160, 15509), (163, 15518), (217, 15749), (236, 15836), (249, 15887), (257, 15923), (265, 15947), (274, 15995), (276, 16010), (293, 16109), (294, 16112), (313, 16193), (319, 16220), (323, 16235), (325, 16238), (334, 16262), (338, 16292), (340, 16313),

Gene: Imara_32 Start: 14898, Stop: 16127, Start Num: 17
Candidate Starts for Imara_32:
(Start: 17 @14898 has 34 MA's), (50, 14991), (51, 14994), (65, 15036), (97, 15135), (104, 15168), (108, 15180), (118, 15195), (127, 15222), (129, 15231), (160, 15318), (163, 15327), (217, 15558), (236, 15645), (249, 15696), (257, 15732), (265, 15756), (274, 15804), (276, 15819), (293, 15918), (294, 15921), (313, 16002), (319, 16029), (323, 16044), (325, 16047), (334, 16071), (338, 16101), (340, 16122),

Gene: Inspire2_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Inspire2_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: IzzyPants24_4 Start: 2698, Stop: 3825, Start Num: 27
Candidate Starts for IzzyPants24_4:
(Start: 27 @2698 has 128 MA's), (53, 2767), (Start: 67 @2803 has 2 MA's), (Start: 69 @2809 has 15 MA's), (79, 2833), (101, 2908), (135, 2980), (137, 2983), (139, 2989), (158, 3022), (165, 3058), (191, 3151), (193, 3154), (207, 3205), (221, 3283), (224, 3295), (233, 3337), (249, 3388), (268, 3469), (276, 3511), (286, 3577), (290, 3592), (328, 3742),

Gene: JRok_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for JRok_4:
(Start: 20 @2641 has 2 MA's), (Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (179, 3064), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (245, 3343), (249, 3346), (261, 3397), (268, 3427), (276, 3469), (281, 3511), (290, 3550), (328, 3700),

Gene: Jahseh_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Jahseh_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: JaimeB_4 Start: 2782, Stop: 3798, Start Num: 69
Candidate Starts for JaimeB_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Jalloh_3 Start: 1854, Stop: 2897, Start Num: 30
Candidate Starts for Jalloh_3:
(Start: 30 @1854 has 1 MA's), (31, 1857), (Start: 32 @1863 has 10 MA's), (84, 1989), (94, 2013), (103, 2052), (146, 2163), (155, 2184), (166, 2229), (192, 2310), (199, 2337), (207, 2364), (229, 2478), (263, 2604), (270, 2640), (284, 2727), (301, 2808), (314, 2859),

Gene: JangDynasty_32 Start: 15184, Stop: 16413, Start Num: 17
Candidate Starts for JangDynasty_32:
(Start: 17 @15184 has 34 MA's), (50, 15277), (51, 15280), (65, 15322), (97, 15421), (104, 15454), (108, 15466), (118, 15481), (127, 15508), (129, 15517), (160, 15604), (163, 15613), (217, 15844), (236, 15931), (249, 15982), (257, 16018), (265, 16042), (274, 16090), (276, 16105), (293, 16204), (294, 16207), (313, 16288), (319, 16315), (323, 16330), (325, 16333), (334, 16357), (338, 16387), (340, 16408),

Gene: Jannah_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Jannah_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Jeanie_4 Start: 2157, Stop: 3251, Start Num: 32
Candidate Starts for Jeanie_4:
(10, 1971), (12, 1992), (15, 2079), (Start: 32 @2157 has 10 MA's), (59, 2217), (70, 2256), (94, 2316), (107, 2373), (123, 2403), (146, 2472), (151, 2484), (172, 2565), (182, 2604), (198, 2655), (245, 2868), (270, 2961), (275, 2991), (292, 3084), (297, 3111), (298, 3120),

Gene: Jella_4 Start: 2683, Stop: 3810, Start Num: 27
Candidate Starts for Jella_4:
(Start: 17 @2656 has 34 MA's), (Start: 27 @2683 has 128 MA's), (53, 2752), (Start: 69 @2794 has 15 MA's), (79, 2818), (101, 2893), (135, 2965), (137, 2968), (139, 2974), (158, 3007), (165, 3043), (191, 3136), (193, 3139), (207, 3190), (221, 3268), (224, 3280), (233, 3322), (249, 3373), (268, 3454), (276, 3496), (290, 3577), (328, 3727),

Gene: Jerky_4 Start: 2740, Stop: 3867, Start Num: 27
Candidate Starts for Jerky_4:
(Start: 20 @2725 has 2 MA's), (Start: 27 @2740 has 128 MA's), (53, 2809), (Start: 69 @2851 has 15 MA's), (79, 2875), (101, 2950), (135, 3022), (137, 3025), (139, 3031), (158, 3064), (191, 3193), (193, 3196), (207, 3247), (221, 3325), (224, 3337), (233, 3379), (249, 3430), (261, 3481), (268, 3511), (276, 3553), (290, 3634), (328, 3784),

Gene: Jessica_7 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Jessica_7:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: JoBros_4 Start: 2660, Stop: 3787, Start Num: 27
Candidate Starts for JoBros_4:
(Start: 27 @2660 has 128 MA's), (53, 2729), (Start: 69 @2771 has 15 MA's), (79, 2795), (101, 2870), (135, 2942), (137, 2945), (139, 2951), (158, 2984), (165, 3020), (191, 3113), (193, 3116), (207, 3167), (221, 3245), (224, 3257), (233, 3299), (249, 3350), (268, 3431), (276, 3473), (290, 3554), (328, 3704),

Gene: JooneeDee_4 Start: 2689, Stop: 3816, Start Num: 27
Candidate Starts for JooneeDee_4:
(Start: 27 @2689 has 128 MA's), (53, 2758), (Start: 67 @2794 has 2 MA's), (Start: 69 @2800 has 15 MA's), (79, 2824), (101, 2899), (135, 2971), (137, 2974), (139, 2980), (158, 3013), (165, 3049), (191, 3142), (193, 3145), (207, 3196), (221, 3274), (224, 3286), (233, 3328), (249, 3379), (268, 3460), (276, 3502), (286, 3568), (290, 3583), (328, 3733),

Gene: Josuke_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Josuke_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: KNG13_6 Start: 2604, Stop: 3737, Start Num: 37
Candidate Starts for KNG13_6:
(Start: 37 @2604 has 7 MA's), (49, 2637), (Start: 67 @2688 has 2 MA's), (90, 2751), (92, 2757), (97, 2784), (99, 2796), (133, 2883), (141, 2904), (145, 2916), (150, 2928), (173, 3012), (176, 3021), (177, 3027), (185, 3072), (186, 3075), (203, 3129), (220, 3219), (223, 3228), (226, 3240), (247, 3357), (251, 3378), (254, 3390), (263, 3417), (269, 3447), (270, 3453), (275, 3483), (298, 3609), (304, 3630), (306, 3639), (325, 3720),

Gene: Kaijohn_4 Start: 2665, Stop: 3792, Start Num: 27
Candidate Starts for Kaijohn_4:
(Start: 20 @2650 has 2 MA's), (Start: 27 @2665 has 128 MA's), (53, 2734), (Start: 67 @2770 has 2 MA's), (Start: 69 @2776 has 15 MA's), (79, 2800), (101, 2875), (135, 2947), (137, 2950), (139, 2956), (158, 2989), (165, 3025), (191, 3118), (193, 3121), (207, 3172), (221, 3250), (224, 3262), (233, 3304), (245, 3352), (249, 3355), (261, 3406), (268, 3436), (276, 3478), (290, 3559), (328, 3709),

Gene: KayPaulus_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for KayPaulus_4:
(Start: 17 @2629 has 34 MA's), (Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 67 @2761 has 2 MA's), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (179, 3064), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: Kels_4 Start: 2100, Stop: 3245, Start Num: 21
Candidate Starts for Kels_4:
(Start: 21 @2100 has 46 MA's), (72, 2229), (94, 2286), (107, 2343), (112, 2352), (143, 2430), (146, 2436), (156, 2460), (163, 2487), (175, 2523), (185, 2574), (200, 2622), (206, 2643), (215, 2685), (220, 2721), (245, 2829), (256, 2865), (274, 2940), (278, 2967), (292, 3045), (297, 3072), (310, 3126), (315, 3150), (329, 3210), (335, 3228),

Gene: Kevanna_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for Kevanna_4:
(Start: 17 @2629 has 34 MA's), (Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 67 @2761 has 2 MA's), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: KillerTomato_4 Start: 2710, Stop: 3837, Start Num: 27
Candidate Starts for KillerTomato_4:
(Start: 17 @2683 has 34 MA's), (Start: 27 @2710 has 128 MA's), (53, 2779), (Start: 67 @2815 has 2 MA's), (Start: 69 @2821 has 15 MA's), (79, 2845), (101, 2920), (135, 2992), (137, 2995), (139, 3001), (158, 3034), (165, 3070), (179, 3118), (191, 3163), (193, 3166), (207, 3217), (221, 3295), (224, 3307), (233, 3349), (245, 3397), (249, 3400), (261, 3451), (268, 3481), (276, 3523), (290, 3604), (328, 3754),

Gene: KingPhillip3_32 Start: 15089, Stop: 16318, Start Num: 17
Candidate Starts for KingPhillip3_32:

(Start: 17 @15089 has 34 MA's), (50, 15182), (51, 15185), (65, 15227), (97, 15326), (104, 15359), (108, 15371), (118, 15386), (127, 15413), (129, 15422), (160, 15509), (163, 15518), (217, 15749), (236, 15836), (249, 15887), (257, 15923), (265, 15947), (274, 15995), (276, 16010), (293, 16109), (294, 16112), (313, 16193), (319, 16220), (323, 16235), (325, 16238), (334, 16262), (338, 16292), (340, 16313),

Gene: Kojax4_4 Start: 2776, Stop: 3798, Start Num: 67
Candidate Starts for Kojax4_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Krili_31 Start: 14817, Stop: 16046, Start Num: 17
Candidate Starts for Krili_31:
(Start: 17 @14817 has 34 MA's), (50, 14910), (51, 14913), (65, 14955), (97, 15054), (104, 15087), (105, 15090), (108, 15099), (118, 15114), (127, 15141), (129, 15150), (160, 15237), (163, 15246), (217, 15477), (236, 15564), (249, 15615), (257, 15651), (265, 15675), (274, 15723), (293, 15837), (294, 15840), (313, 15921), (319, 15948), (323, 15963), (325, 15966), (334, 15990), (338, 16020), (340, 16041),

Gene: KylieMac_7 Start: 2536, Stop: 3696, Start Num: 21
Candidate Starts for KylieMac_7:
(Start: 21 @2536 has 46 MA's), (80, 2695), (82, 2704), (94, 2737), (107, 2794), (124, 2824), (131, 2848), (146, 2887), (149, 2896), (156, 2911), (178, 2986), (186, 3028), (197, 3064), (198, 3067), (200, 3073), (206, 3094), (224, 3187), (245, 3280), (256, 3316), (266, 3358), (269, 3367), (276, 3406), (297, 3523), (299, 3535), (310, 3577), (315, 3601), (329, 3661), (335, 3679),

Gene: KyriosFaba_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for KyriosFaba_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Laila_7 Start: 2549, Stop: 3709, Start Num: 21
Candidate Starts for Laila_7:
(Start: 21 @2549 has 46 MA's), (80, 2708), (82, 2717), (94, 2750), (107, 2807), (124, 2837), (131, 2861), (146, 2900), (149, 2909), (156, 2924), (178, 2999), (186, 3041), (192, 3056), (197, 3077), (198, 3080), (200, 3086), (206, 3107), (224, 3200), (245, 3293), (256, 3329), (266, 3371), (269, 3380), (297, 3536), (299, 3548), (310, 3590), (315, 3614), (329, 3674), (335, 3692),

Gene: LauKoruNamu_5 Start: 2437, Stop: 3570, Start Num: 37
Candidate Starts for LauKoruNamu_5:
(Start: 37 @2437 has 7 MA's), (49, 2470), (Start: 67 @2521 has 2 MA's), (90, 2584), (92, 2590), (97, 2617), (99, 2629), (133, 2716), (141, 2737), (145, 2749), (150, 2761), (173, 2845), (176, 2854), (177, 2860), (185, 2905), (186, 2908), (203, 2962), (220, 3052), (223, 3061), (226, 3073), (247, 3190), (248, 3196), (251, 3211), (254, 3223), (263, 3250), (269, 3280), (270, 3286), (275, 3316), (298, 3442), (304, 3463), (306, 3472), (325, 3553),

Gene: LaviMo_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for LaviMo_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191,

3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Leafy_4 Start: 2677, Stop: 3804, Start Num: 27
Candidate Starts for Leafy_4:
(Start: 17 @2650 has 34 MA's), (Start: 27 @2677 has 128 MA's), (53, 2746), (Start: 67 @2782 has 2 MA's), (Start: 69 @2788 has 15 MA's), (79, 2812), (101, 2887), (135, 2959), (137, 2962), (139, 2968), (158, 3001), (165, 3037), (191, 3130), (193, 3133), (207, 3184), (221, 3262), (224, 3274), (233, 3316), (245, 3364), (249, 3367), (261, 3418), (268, 3448), (276, 3490), (290, 3571), (328, 3721),

Gene: LemonPepper_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for LemonPepper_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Link_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Link_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (75, 2697), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: LionelHutz_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for LionelHutz_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Livingwater_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for Livingwater_4:
(Start: 17 @2629 has 34 MA's), (Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 67 @2761 has 2 MA's), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (179, 3064), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: Loca_4 Start: 2677, Stop: 3804, Start Num: 27
Candidate Starts for Loca_4:
(Start: 17 @2650 has 34 MA's), (Start: 27 @2677 has 128 MA's), (53, 2746), (Start: 67 @2782 has 2 MA's), (Start: 69 @2788 has 15 MA's), (79, 2812), (101, 2887), (135, 2959), (137, 2962), (139, 2968), (158, 3001), (165, 3037), (191, 3130), (193, 3133), (207, 3184), (221, 3262), (233, 3316), (245, 3364), (249, 3367), (261, 3418), (268, 3448), (276, 3490), (281, 3532), (290, 3571), (328, 3721),

Gene: Lola20_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for Lola20_4:
(Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: Lore_6 Start: 2549, Stop: 3709, Start Num: 21
Candidate Starts for Lore_6:
(Start: 21 @2549 has 46 MA's), (80, 2708), (82, 2717), (94, 2750), (107, 2807), (124, 2837), (131, 2861), (146, 2900), (149, 2909), (156, 2924), (178, 2999), (186, 3041), (192, 3056), (197, 3077), (198,

3080), (200, 3086), (206, 3107), (224, 3200), (245, 3293), (256, 3329), (266, 3371), (269, 3380), (297, 3536), (299, 3548), (310, 3590), (315, 3614), (329, 3674), (335, 3692),

Gene: LouisXIV_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for LouisXIV_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Lunatic_4 Start: 2647, Stop: 3774, Start Num: 27
Candidate Starts for Lunatic_4:
(Start: 27 @2647 has 128 MA's), (53, 2716), (Start: 67 @2752 has 2 MA's), (Start: 69 @2758 has 15 MA's), (79, 2782), (101, 2857), (135, 2929), (137, 2932), (139, 2938), (158, 2971), (165, 3007), (191, 3100), (193, 3103), (207, 3154), (221, 3232), (224, 3244), (233, 3286), (249, 3337), (268, 3418), (276, 3460), (286, 3526), (290, 3541), (328, 3691),

Gene: Luxx_4 Start: 2794, Stop: 3810, Start Num: 69
Candidate Starts for Luxx_4:
(Start: 17 @2656 has 34 MA's), (Start: 27 @2683 has 128 MA's), (53, 2752), (Start: 69 @2794 has 15 MA's), (79, 2818), (101, 2893), (135, 2965), (137, 2968), (139, 2974), (158, 3007), (165, 3043), (191, 3136), (193, 3139), (207, 3190), (221, 3268), (224, 3280), (233, 3322), (249, 3373), (268, 3454), (276, 3496), (290, 3577), (328, 3727),

Gene: MadKillah_33 Start: 15027, Stop: 16256, Start Num: 17
Candidate Starts for MadKillah_33:
(Start: 17 @15027 has 34 MA's), (50, 15120), (51, 15123), (65, 15165), (97, 15264), (104, 15297), (108, 15309), (118, 15324), (127, 15351), (129, 15360), (160, 15447), (163, 15456), (217, 15687), (236, 15774), (249, 15825), (257, 15861), (265, 15885), (274, 15933), (276, 15948), (293, 16047), (294, 16050), (313, 16131), (319, 16158), (323, 16173), (325, 16176), (334, 16200), (338, 16230), (340, 16251),

Gene: Madebyisha_4 Start: 2851, Stop: 3867, Start Num: 69
Candidate Starts for Madebyisha_4:
(Start: 20 @2725 has 2 MA's), (Start: 27 @2740 has 128 MA's), (53, 2809), (Start: 69 @2851 has 15 MA's), (79, 2875), (101, 2950), (135, 3022), (137, 3025), (139, 3031), (158, 3064), (191, 3193), (193, 3196), (207, 3247), (221, 3325), (224, 3337), (233, 3379), (249, 3430), (261, 3481), (268, 3511), (276, 3553), (290, 3634), (328, 3784),

Gene: Maggie_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Maggie_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Majesty_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Majesty_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: ManAs_4 Start: 2659, Stop: 3786, Start Num: 27

Candidate Starts for ManAs_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Maneater_4 Start: 2758, Stop: 3774, Start Num: 69
Candidate Starts for Maneater_4:
(Start: 27 @2647 has 128 MA's), (53, 2716), (Start: 69 @2758 has 15 MA's), (79, 2782), (101, 2857), (135, 2929), (137, 2932), (139, 2938), (158, 2971), (165, 3007), (191, 3100), (193, 3103), (207, 3154), (221, 3232), (224, 3244), (233, 3286), (249, 3337), (261, 3388), (268, 3418), (276, 3460), (290, 3541), (328, 3691),

Gene: Marichuy_4 Start: 2875, Stop: 3891, Start Num: 69
Candidate Starts for Marichuy_4:
(Start: 27 @2764 has 128 MA's), (53, 2833), (Start: 69 @2875 has 15 MA's), (79, 2899), (101, 2974), (135, 3046), (137, 3049), (139, 3055), (158, 3088), (165, 3124), (191, 3217), (193, 3220), (207, 3271), (221, 3349), (224, 3361), (233, 3403), (249, 3454), (268, 3535), (276, 3577), (290, 3658), (328, 3808),

Gene: Mariposa_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Mariposa_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Massimo_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Massimo_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: MasterPitts_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for MasterPitts_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: MauiIvory_4 Start: 2764, Stop: 3891, Start Num: 27
Candidate Starts for MauiIvory_4:
(Start: 27 @2764 has 128 MA's), (53, 2833), (Start: 67 @2869 has 2 MA's), (Start: 69 @2875 has 15 MA's), (79, 2899), (101, 2974), (135, 3046), (137, 3049), (139, 3055), (158, 3088), (165, 3124), (191, 3217), (193, 3220), (207, 3271), (221, 3349), (224, 3361), (233, 3403), (249, 3454), (268, 3535), (276, 3577), (286, 3643), (290, 3658), (328, 3808),

Gene: McGonagall_4 Start: 2157, Stop: 3251, Start Num: 32
Candidate Starts for McGonagall_4:
(10, 1971), (12, 1992), (15, 2079), (Start: 32 @2157 has 10 MA's), (59, 2217), (70, 2256), (94, 2316), (107, 2373), (123, 2403), (146, 2472), (151, 2484), (172, 2565), (182, 2604), (198, 2655), (245, 2868), (270, 2961), (275, 2991), (292, 3084), (297, 3111), (298, 3120),

Gene: McShie_4 Start: 2656, Stop: 3783, Start Num: 27

Candidate Starts for McShie_4:
(Start: 20 @2641 has 2 MA's), (Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (179, 3064), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (245, 3343), (249, 3346), (268, 3427), (276, 3469), (281, 3511), (290, 3550), (328, 3700),

Gene: MelBee03_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for MelBee03_4:
(Start: 17 @2629 has 34 MA's), (Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 67 @2761 has 2 MA's), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: Miaurora_4 Start: 2764, Stop: 3891, Start Num: 27
Candidate Starts for Miaurora_4:
(Start: 27 @2764 has 128 MA's), (53, 2833), (Start: 67 @2869 has 2 MA's), (Start: 69 @2875 has 15 MA's), (79, 2899), (101, 2974), (135, 3046), (137, 3049), (139, 3055), (158, 3088), (165, 3124), (191, 3217), (193, 3220), (207, 3271), (221, 3349), (224, 3361), (233, 3403), (249, 3454), (268, 3535), (276, 3577), (286, 3643), (290, 3658), (328, 3808),

Gene: Minima_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Minima_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: MirimarMandM_4 Start: 2689, Stop: 3858, Start Num: 27
Candidate Starts for MirimarMandM_4:
(Start: 27 @2689 has 128 MA's), (53, 2758), (Start: 67 @2794 has 2 MA's), (Start: 69 @2800 has 15 MA's), (79, 2824), (101, 2899), (135, 2971), (137, 2974), (139, 2980), (158, 3013), (165, 3049), (191, 3142), (193, 3145), (207, 3196), (221, 3274), (224, 3286), (233, 3328), (249, 3379), (268, 3460), (276, 3502), (286, 3568), (290, 3583), (326, 3727), (328, 3733),

Gene: MoRicky_4 Start: 2059, Stop: 3159, Start Num: 19
Candidate Starts for MoRicky_4:
(Start: 19 @2059 has 4 MA's), (52, 2143), (64, 2182), (Start: 69 @2194 has 15 MA's), (115, 2329), (136, 2389), (143, 2407), (166, 2470), (255, 2815), (258, 2827), (262, 2839), (284, 2962), (299, 3031), (300, 3034), (305, 3055), (309, 3070), (312, 3085),

Gene: Moloch_6 Start: 2621, Stop: 3781, Start Num: 21
Candidate Starts for Moloch_6:
(Start: 21 @2621 has 46 MA's), (56, 2711), (80, 2780), (94, 2822), (97, 2837), (98, 2846), (107, 2879), (124, 2909), (132, 2936), (146, 2972), (149, 2981), (156, 2996), (176, 3062), (186, 3113), (192, 3128), (197, 3149), (200, 3158), (207, 3182), (224, 3272), (245, 3365), (256, 3401), (260, 3413), (266, 3443), (269, 3452), (297, 3608), (310, 3662), (315, 3686), (329, 3746), (335, 3764),

Gene: MooKitty_4 Start: 2089, Stop: 3195, Start Num: 32
Candidate Starts for MooKitty_4:
(Start: 32 @2089 has 10 MA's), (63, 2170), (Start: 69 @2185 has 15 MA's), (94, 2245), (96, 2251), (97, 2260), (146, 2395), (155, 2416), (180, 2497), (211, 2620), (214, 2635), (224, 2689), (256, 2818), (263, 2839), (273, 2887), (292, 2998), (298, 3034), (305, 3061), (309, 3076), (310, 3079), (315, 3103), (327, 3145),

Gene: MooMoo_3 Start: 1799, Stop: 3073, Start Num: 17
Candidate Starts for MooMoo_3:
(Start: 17 @1799 has 34 MA's), (24, 1817), (42, 1868), (65, 1931), (100, 2042), (102, 2048), (105, 2063), (108, 2072), (111, 2078), (118, 2087), (125, 2105), (129, 2123), (135, 2141), (138, 2150), (149, 2177), (156, 2192), (160, 2210), (163, 2219), (168, 2246), (171, 2258), (175, 2273), (176, 2276), (177, 2282), (179, 2288), (187, 2330), (211, 2417), (215, 2435), (217, 2447), (221, 2474), (223, 2480), (244, 2582), (249, 2585), (257, 2621), (261, 2636), (271, 2681), (277, 2714), (280, 2735), (281, 2750), (293, 2807), (294, 2810), (296, 2819), (299, 2834), (305, 2858), (321, 2930), (330, 2972), (334, 2981), (336, 2990),

Gene: Mori_31 Start: 14688, Stop: 15917, Start Num: 17
Candidate Starts for Mori_31:
(Start: 17 @14688 has 34 MA's), (50, 14781), (51, 14784), (65, 14826), (97, 14925), (104, 14958), (108, 14970), (118, 14985), (127, 15012), (129, 15021), (160, 15108), (163, 15117), (217, 15348), (236, 15435), (249, 15486), (257, 15522), (265, 15546), (274, 15594), (293, 15708), (294, 15711), (313, 15792), (319, 15819), (323, 15834), (325, 15837), (334, 15861), (338, 15891), (340, 15912),

Gene: MrGreen_4 Start: 2677, Stop: 3804, Start Num: 27
Candidate Starts for MrGreen_4:
(Start: 17 @2650 has 34 MA's), (Start: 27 @2677 has 128 MA's), (53, 2746), (Start: 67 @2782 has 2 MA's), (Start: 69 @2788 has 15 MA's), (79, 2812), (101, 2887), (135, 2959), (137, 2962), (139, 2968), (158, 3001), (165, 3037), (191, 3130), (193, 3133), (207, 3184), (221, 3262), (224, 3274), (233, 3316), (245, 3364), (249, 3367), (261, 3418), (268, 3448), (276, 3490), (290, 3571), (328, 3721),

Gene: Murai_32 Start: 14878, Stop: 16107, Start Num: 17
Candidate Starts for Murai_32:
(Start: 17 @14878 has 34 MA's), (50, 14971), (51, 14974), (65, 15016), (97, 15115), (104, 15148), (105, 15151), (108, 15160), (118, 15175), (127, 15202), (129, 15211), (160, 15298), (163, 15307), (217, 15538), (236, 15625), (249, 15676), (257, 15712), (265, 15736), (274, 15784), (293, 15898), (294, 15901), (313, 15982), (319, 16009), (323, 16024), (325, 16027), (334, 16051), (338, 16081), (340, 16102),

Gene: Muttlie_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Muttlie_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (75, 2697), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Myram_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Myram_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Naby_4 Start: 2373, Stop: 3533, Start Num: 27
Candidate Starts for Naby_4:
(Start: 19 @2355 has 4 MA's), (24, 2364), (Start: 27 @2373 has 128 MA's), (Start: 69 @2484 has 15 MA's), (79, 2508), (103, 2586), (135, 2655), (139, 2664), (158, 2697), (179, 2781), (193, 2829), (221, 2958), (224, 2970), (231, 3003), (243, 3057), (249, 3063), (261, 3114), (276, 3186), (286, 3252), (290, 3267), (326, 3411), (328, 3417),

Gene: Namsahir_4 Start: 2680, Stop: 3846, Start Num: 27

Candidate Starts for Namsahir_4:
(Start: 27 @2680 has 128 MA's), (53, 2749), (Start: 67 @2785 has 2 MA's), (Start: 69 @2791 has 15 MA's), (79, 2815), (101, 2890), (135, 2962), (137, 2965), (139, 2971), (158, 3004), (165, 3040), (191, 3133), (193, 3136), (207, 3187), (221, 3265), (224, 3277), (233, 3319), (249, 3370), (268, 3451), (276, 3493), (286, 3559), (290, 3574), (326, 3718), (328, 3724),

Gene: Nebulanyx_6 Start: 2604, Stop: 3737, Start Num: 37
Candidate Starts for Nebulanyx_6:
(Start: 37 @2604 has 7 MA's), (49, 2637), (Start: 67 @2688 has 2 MA's), (90, 2751), (92, 2757), (97, 2784), (99, 2796), (133, 2883), (141, 2904), (145, 2916), (150, 2928), (173, 3012), (176, 3021), (177, 3027), (185, 3072), (186, 3075), (203, 3129), (220, 3219), (223, 3228), (226, 3240), (235, 3285), (247, 3357), (251, 3378), (254, 3390), (263, 3417), (269, 3447), (270, 3453), (275, 3483), (298, 3609), (304, 3630), (306, 3639), (325, 3720),

Gene: NeumannU_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for NeumannU_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: NiebruSaylor_31 Start: 14689, Stop: 15918, Start Num: 17
Candidate Starts for NiebruSaylor_31:
(Start: 17 @14689 has 34 MA's), (50, 14782), (51, 14785), (65, 14827), (97, 14926), (104, 14959), (105, 14962), (108, 14971), (118, 14986), (127, 15013), (129, 15022), (160, 15109), (163, 15118), (217, 15349), (236, 15436), (249, 15487), (257, 15523), (265, 15547), (274, 15595), (293, 15709), (294, 15712), (313, 15793), (319, 15820), (323, 15835), (325, 15838), (334, 15862), (338, 15892), (340, 15913),

Gene: Niffler_4 Start: 2737, Stop: 3864, Start Num: 27
Candidate Starts for Niffler_4:
(Start: 27 @2737 has 128 MA's), (53, 2806), (Start: 67 @2842 has 2 MA's), (Start: 69 @2848 has 15 MA's), (79, 2872), (101, 2947), (135, 3019), (137, 3022), (139, 3028), (158, 3061), (165, 3097), (191, 3190), (193, 3193), (207, 3244), (221, 3322), (224, 3334), (233, 3376), (249, 3427), (268, 3508), (276, 3550), (286, 3616), (290, 3631), (328, 3781),

Gene: Nobel_4 Start: 2764, Stop: 3891, Start Num: 27
Candidate Starts for Nobel_4:
(Start: 27 @2764 has 128 MA's), (53, 2833), (Start: 67 @2869 has 2 MA's), (Start: 69 @2875 has 15 MA's), (79, 2899), (101, 2974), (135, 3046), (137, 3049), (139, 3055), (158, 3088), (165, 3124), (191, 3217), (193, 3220), (207, 3271), (221, 3349), (224, 3361), (233, 3403), (249, 3454), (268, 3535), (276, 3577), (286, 3643), (290, 3658), (328, 3808),

Gene: Noelani_4 Start: 2647, Stop: 3774, Start Num: 27
Candidate Starts for Noelani_4:
(Start: 27 @2647 has 128 MA's), (53, 2716), (Start: 67 @2752 has 2 MA's), (Start: 69 @2758 has 15 MA's), (79, 2782), (101, 2857), (135, 2929), (137, 2932), (139, 2938), (158, 2971), (165, 3007), (191, 3100), (193, 3103), (207, 3154), (221, 3232), (224, 3244), (233, 3286), (249, 3337), (261, 3388), (268, 3418), (276, 3460), (286, 3526), (290, 3541), (328, 3691),

Gene: Noely_4 Start: 2576, Stop: 3709, Start Num: 37
Candidate Starts for Noely_4:
(33, 2564), (Start: 37 @2576 has 7 MA's), (49, 2609), (90, 2723), (92, 2729), (99, 2768), (133, 2855), (145, 2888), (150, 2900), (173, 2984), (186, 3047), (195, 3071), (203, 3101), (204, 3107), (220, 3191),

(223, 3200), (230, 3236), (247, 3329), (248, 3335), (251, 3350), (254, 3362), (263, 3389), (264, 3392), (267, 3413), (269, 3419), (270, 3425), (275, 3455), (276, 3458), (298, 3581), (304, 3602), (306, 3611),

Gene: Oaklynn_4 Start: 2770, Stop: 3786, Start Num: 69
Candidate Starts for Oaklynn_4:
(Start: 20 @2644 has 2 MA's), (Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (179, 3067), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (245, 3346), (249, 3349), (261, 3400), (268, 3430), (276, 3472), (281, 3514), (290, 3553), (328, 3703),

Gene: Octopus_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Octopus_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: OdetoJoy_4 Start: 2851, Stop: 3867, Start Num: 69
Candidate Starts for OdetoJoy_4:
(Start: 20 @2725 has 2 MA's), (Start: 27 @2740 has 128 MA's), (53, 2809), (Start: 69 @2851 has 15 MA's), (79, 2875), (101, 2950), (135, 3022), (137, 3025), (139, 3031), (158, 3064), (191, 3193), (193, 3196), (207, 3247), (221, 3325), (224, 3337), (233, 3379), (249, 3430), (261, 3481), (268, 3511), (276, 3553), (290, 3634), (328, 3784),

Gene: Otwor_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Otwor_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Owens_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Owens_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: PaoPu_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for PaoPu_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Pauu_5 Start: 2437, Stop: 3570, Start Num: 37
Candidate Starts for Pauu_5:
(Start: 37 @2437 has 7 MA's), (49, 2470), (Start: 67 @2521 has 2 MA's), (90, 2584), (92, 2590), (97, 2617), (99, 2629), (133, 2716), (141, 2737), (145, 2749), (150, 2761), (173, 2845), (176, 2854), (177, 2860), (185, 2905), (186, 2908), (203, 2962), (220, 3052), (223, 3061), (226, 3073), (247, 3190), (248, 3196), (251, 3211), (254, 3223), (263, 3250), (269, 3280), (270, 3286), (275, 3316), (298, 3442), (304, 3463), (306, 3472), (325, 3553),

Gene: Penoan_5 Start: 2899, Stop: 4056, Start Num: 25
Candidate Starts for Penoan_5:

(25, 2899), (26, 2905), (68, 3013), (84, 3055), (89, 3064), (104, 3130), (126, 3178), (130, 3190), (186, 3388), (194, 3409), (197, 3424), (216, 3499), (232, 3583), (256, 3676), (267, 3721), (270, 3733), (272, 3742), (278, 3778), (280, 3793), (297, 3883), (298, 3892), (329, 4021),

Gene: PensacolaC28_2 Start: 1645, Stop: 2775, Start Num: 19
Candidate Starts for PensacolaC28_2:
(Start: 19 @1645 has 4 MA's), (52, 1732), (83, 1819), (115, 1921), (122, 1933), (173, 2092), (255, 2425), (256, 2431), (263, 2452), (275, 2518), (279, 2542), (284, 2575), (299, 2647), (309, 2686),

Gene: Picconator_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Picconator_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Picnic_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Picnic_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Piku_2 Start: 2066, Stop: 3196, Start Num: 35
Candidate Starts for Piku_2:
(Start: 35 @2066 has 5 MA's), (86, 2201), (197, 2576), (203, 2594), (206, 2606), (208, 2615), (213, 2642), (225, 2702), (263, 2855), (273, 2903), (275, 2921), (282, 2966), (296, 3032), (302, 3062), (304, 3068), (308, 3086), (311, 3098),

Gene: PoRanda_4 Start: 2689, Stop: 3858, Start Num: 27
Candidate Starts for PoRanda_4:
(Start: 27 @2689 has 128 MA's), (53, 2758), (Start: 67 @2794 has 2 MA's), (Start: 69 @2800 has 15 MA's), (79, 2824), (101, 2899), (135, 2971), (137, 2974), (139, 2980), (158, 3013), (165, 3049), (191, 3142), (193, 3145), (207, 3196), (221, 3274), (224, 3286), (233, 3328), (249, 3379), (268, 3460), (276, 3502), (286, 3568), (290, 3583), (326, 3727), (328, 3733),

Gene: Pondwater_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Pondwater_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Prospero_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Prospero_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Publix_4 Start: 2680, Stop: 3846, Start Num: 27
Candidate Starts for Publix_4:
(Start: 27 @2680 has 128 MA's), (53, 2749), (Start: 67 @2785 has 2 MA's), (Start: 69 @2791 has 15 MA's), (79, 2815), (101, 2890), (135, 2962), (137, 2965), (139, 2971), (158, 3004), (165, 3040), (191, 3133), (193, 3136), (207, 3187), (221, 3265), (224, 3277), (233, 3319), (249, 3370), (268, 3451), (276, 3493), (286, 3559), (290, 3574), (326, 3718), (328, 3724),

Gene: Puddles3_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Puddles3_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: PuffyCat_4 Start: 2689, Stop: 3816, Start Num: 27
Candidate Starts for PuffyCat_4:
(Start: 27 @2689 has 128 MA's), (53, 2758), (Start: 67 @2794 has 2 MA's), (Start: 69 @2800 has 15 MA's), (79, 2824), (101, 2899), (135, 2971), (137, 2974), (139, 2980), (158, 3013), (165, 3049), (191, 3142), (193, 3145), (207, 3196), (221, 3274), (224, 3286), (233, 3328), (249, 3379), (268, 3460), (276, 3502), (286, 3568), (290, 3583), (328, 3733),

Gene: Quaker_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for Quaker_4:
(Start: 17 @2629 has 34 MA's), (Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 67 @2761 has 2 MA's), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (179, 3064), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: RRH1_04 Start: 2471, Stop: 3589, Start Num: 32
Candidate Starts for RRH1_04:
(Start: 32 @2471 has 10 MA's), (72, 2582), (94, 2639), (97, 2654), (146, 2789), (147, 2792), (168, 2864), (197, 2975), (224, 3098), (229, 3122), (285, 3380), (297, 3434), (307, 3476), (320, 3533),

Gene: Rahul_4 Start: 2153, Stop: 3259, Start Num: 32
Candidate Starts for Rahul_4:
(Start: 32 @2153 has 10 MA's), (89, 2291), (94, 2309), (96, 2315), (97, 2324), (146, 2459), (163, 2510), (167, 2531), (168, 2534), (192, 2633), (198, 2657), (229, 2801), (238, 2840), (274, 2981), (292, 3086), (298, 3122), (299, 3125), (309, 3164), (334, 3251),

Gene: Rhogar_4 Start: 2782, Stop: 3798, Start Num: 69
Candidate Starts for Rhogar_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Rhysand_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Rhysand_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Rira_4 Start: 2698, Stop: 3825, Start Num: 27
Candidate Starts for Rira_4:
(Start: 27 @2698 has 128 MA's), (53, 2767), (Start: 67 @2803 has 2 MA's), (Start: 69 @2809 has 15 MA's), (79, 2833), (101, 2908), (135, 2980), (137, 2983), (139, 2989), (158, 3022), (165, 3058), (191, 3151), (193, 3154), (207, 3205), (221, 3283), (224, 3295), (233, 3337), (249, 3388), (268, 3469), (276, 3511), (286, 3577), (290, 3592), (328, 3742),

Gene: Ronnie_6 Start: 2547, Stop: 3707, Start Num: 21

Candidate Starts for Ronnie_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Root_5 Start: 2938, Stop: 4086, Start Num: 29
Candidate Starts for Root_5:
(11, 2782), (Start: 29 @2938 has 1 MA's), (36, 2962), (89, 3103), (91, 3109), (104, 3169), (117, 3193), (130, 3229), (153, 3289), (197, 3454), (209, 3502), (229, 3598), (232, 3613), (234, 3622), (263, 3727), (270, 3763), (276, 3796), (280, 3823), (281, 3838), (283, 3844), (297, 3913), (298, 3922), (317, 4000), (329, 4051),

Gene: RoscoWindex_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for RoscoWindex_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Ryadel_35 Start: 15905, Stop: 17134, Start Num: 17
Candidate Starts for Ryadel_35:
(Start: 17 @15905 has 34 MA's), (50, 15998), (51, 16001), (61, 16025), (65, 16043), (97, 16142), (104, 16175), (108, 16187), (118, 16202), (127, 16229), (129, 16238), (160, 16325), (163, 16334), (217, 16565), (236, 16652), (249, 16703), (257, 16739), (265, 16763), (274, 16811), (276, 16826), (293, 16925), (294, 16928), (313, 17009), (319, 17036), (323, 17051), (325, 17054), (334, 17078), (338, 17108), (340, 17129),

Gene: Sachet_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Sachet_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Sage7_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Sage7_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: SallySpecial_4 Start: 2127, Stop: 3287, Start Num: 32
Candidate Starts for SallySpecial_4:
(Start: 32 @2127 has 10 MA's), (47, 2163), (56, 2184), (70, 2232), (78, 2247), (94, 2292), (96, 2298), (97, 2307), (109, 2355), (128, 2394), (146, 2439), (147, 2442), (167, 2511), (172, 2529), (197, 2619), (211, 2673), (214, 2688), (224, 2742), (234, 2790), (236, 2793), (245, 2835), (275, 2958), (292, 3051), (293, 3060), (296, 3072), (297, 3078),

Gene: Sandman_6 Start: 2621, Stop: 3781, Start Num: 21
Candidate Starts for Sandman_6:
(Start: 21 @2621 has 46 MA's), (56, 2711), (80, 2780), (94, 2822), (97, 2837), (98, 2846), (107, 2879), (124, 2909), (132, 2936), (146, 2972), (149, 2981), (156, 2996), (176, 3062), (186, 3113), (192, 3128), (197, 3149), (200, 3158), (207, 3182), (224, 3272), (245, 3365), (256, 3401), (260, 3413), (266, 3443),

(269, 3452), (297, 3608), (310, 3662), (315, 3686), (329, 3746), (335, 3764),

Gene: SantasSleigh_4 Start: 2695, Stop: 3822, Start Num: 27
Candidate Starts for SantasSleigh_4:
(Start: 27 @2695 has 128 MA's), (53, 2764), (Start: 67 @2800 has 2 MA's), (Start: 69 @2806 has 15 MA's), (79, 2830), (101, 2905), (135, 2977), (137, 2980), (139, 2986), (158, 3019), (165, 3055), (191, 3148), (193, 3151), (207, 3202), (221, 3280), (224, 3292), (233, 3334), (249, 3385), (268, 3466), (276, 3508), (290, 3589), (328, 3739),

Gene: Saphira_6 Start: 2549, Stop: 3709, Start Num: 21
Candidate Starts for Saphira_6:
(Start: 21 @2549 has 46 MA's), (80, 2708), (82, 2717), (94, 2750), (107, 2807), (124, 2837), (131, 2861), (146, 2900), (149, 2909), (156, 2924), (178, 2999), (186, 3041), (197, 3077), (198, 3080), (200, 3086), (206, 3107), (224, 3200), (245, 3293), (256, 3329), (266, 3371), (269, 3380), (297, 3536), (299, 3548), (310, 3590), (315, 3614), (329, 3674), (335, 3692),

Gene: Sara_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for Sara_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: Scamander_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Scamander_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Schiebs_4 Start: 2041, Stop: 3084, Start Num: 41
Candidate Starts for Schiebs_4:
(6, 1825), (Start: 41 @2041 has 1 MA's), (47, 2059), (58, 2086), (94, 2188), (96, 2194), (97, 2203), (107, 2245), (113, 2254), (124, 2278), (138, 2320), (146, 2338), (155, 2359), (160, 2380), (168, 2413), (172, 2431), (179, 2452), (183, 2470), (203, 2524), (229, 2653), (238, 2692), (245, 2722), (275, 2845), (280, 2875), (286, 2914), (292, 2938), (293, 2947), (297, 2965), (298, 2974), (299, 2977), (316, 3043), (317, 3049), (324, 3073),

Gene: SchoolBus_32 Start: 15092, Stop: 16321, Start Num: 17
Candidate Starts for SchoolBus_32:
(Start: 17 @15092 has 34 MA's), (50, 15185), (51, 15188), (65, 15230), (97, 15329), (104, 15362), (108, 15374), (118, 15389), (127, 15416), (129, 15425), (160, 15512), (163, 15521), (217, 15752), (236, 15839), (249, 15890), (257, 15926), (265, 15950), (274, 15998), (276, 16013), (293, 16112), (294, 16115), (313, 16196), (319, 16223), (323, 16238), (325, 16241), (334, 16265), (338, 16295), (340, 16316),

Gene: Schuy_33 Start: 15036, Stop: 16265, Start Num: 17
Candidate Starts for Schuy_33:
(Start: 17 @15036 has 34 MA's), (50, 15129), (51, 15132), (65, 15174), (97, 15273), (104, 15306), (105, 15309), (108, 15318), (118, 15333), (127, 15360), (129, 15369), (160, 15456), (163, 15465), (217, 15696), (236, 15783), (249, 15834), (257, 15870), (265, 15894), (274, 15942), (293, 16056), (294, 16059), (313, 16140), (319, 16167), (323, 16182), (325, 16185), (334, 16209), (338, 16239), (340, 16260),

Gene: Scrunchy_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Scrunchy_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: SeaWolves_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for SeaWolves_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: SerialPhiller_4 Start: 2175, Stop: 3320, Start Num: 21
Candidate Starts for SerialPhiller_4:
(Start: 21 @2175 has 46 MA's), (72, 2304), (94, 2361), (107, 2418), (112, 2427), (143, 2505), (146, 2511), (156, 2535), (163, 2562), (175, 2598), (185, 2649), (200, 2697), (206, 2718), (215, 2760), (220, 2796), (245, 2904), (256, 2940), (274, 3015), (278, 3042), (292, 3120), (297, 3147), (310, 3201), (315, 3225), (329, 3285), (335, 3303),

Gene: Seume_6 Start: 2343, Stop: 3503, Start Num: 21
Candidate Starts for Seume_6:
(Start: 21 @2343 has 46 MA's), (56, 2433), (75, 2493), (80, 2502), (94, 2544), (97, 2559), (98, 2568), (107, 2601), (124, 2631), (132, 2658), (146, 2694), (149, 2703), (156, 2718), (176, 2784), (178, 2793), (186, 2835), (192, 2850), (197, 2871), (200, 2880), (207, 2904), (224, 2994), (245, 3087), (256, 3123), (260, 3135), (266, 3165), (269, 3174), (297, 3330), (310, 3384), (315, 3408), (329, 3468), (335, 3486),

Gene: Shida_32 Start: 14943, Stop: 16172, Start Num: 17
Candidate Starts for Shida_32:
(Start: 17 @14943 has 34 MA's), (50, 15036), (51, 15039), (65, 15081), (97, 15180), (104, 15213), (105, 15216), (108, 15225), (118, 15240), (127, 15267), (129, 15276), (160, 15363), (163, 15372), (217, 15603), (236, 15690), (249, 15741), (257, 15777), (265, 15801), (274, 15849), (293, 15963), (294, 15966), (313, 16047), (319, 16074), (323, 16089), (325, 16092), (334, 16116), (338, 16146), (340, 16167),

Gene: Sippinontea_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for Sippinontea_4:
(Start: 17 @2629 has 34 MA's), (Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 67 @2761 has 2 MA's), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (179, 3064), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: Slentz_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Slentz_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Slizam_4 Start: 2698, Stop: 3825, Start Num: 27
Candidate Starts for Slizam_4:
(Start: 27 @2698 has 128 MA's), (53, 2767), (Start: 67 @2803 has 2 MA's), (Start: 69 @2809 has 15 MA's), (79, 2833), (101, 2908), (135, 2980), (137, 2983), (139, 2989), (158, 3022), (165, 3058), (191, 3151), (193, 3154), (207, 3205), (221, 3283), (224, 3295), (233, 3337), (249, 3388), (268, 3469), (276, 3511), (286, 3577), (290, 3592), (328, 3742),

Gene: Smilerella_4 Start: 2059, Stop: 3159, Start Num: 19
Candidate Starts for Smilerella_4:
(Start: 19 @2059 has 4 MA's), (52, 2143), (64, 2182), (Start: 69 @2194 has 15 MA's), (115, 2329), (136, 2389), (143, 2407), (166, 2470), (255, 2815), (258, 2827), (262, 2839), (284, 2962), (299, 3031), (300, 3034), (305, 3055), (309, 3070), (312, 3085),

Gene: Smooch_34 Start: 16232, Stop: 17461, Start Num: 17
Candidate Starts for Smooch_34:
(Start: 17 @16232 has 34 MA's), (50, 16325), (51, 16328), (65, 16370), (97, 16469), (104, 16502), (108, 16514), (118, 16529), (127, 16556), (129, 16565), (160, 16652), (163, 16661), (217, 16892), (236, 16979), (249, 17030), (257, 17066), (265, 17090), (274, 17138), (293, 17252), (294, 17255), (313, 17336), (319, 17363), (323, 17378), (325, 17381), (334, 17405), (338, 17435), (340, 17456),

Gene: Snuffles_5 Start: 2868, Stop: 3995, Start Num: 27
Candidate Starts for Snuffles_5:
(Start: 17 @2841 has 34 MA's), (Start: 27 @2868 has 128 MA's), (53, 2937), (Start: 67 @2973 has 2 MA's), (Start: 69 @2979 has 15 MA's), (79, 3003), (101, 3078), (135, 3150), (137, 3153), (139, 3159), (158, 3192), (165, 3228), (191, 3321), (193, 3324), (207, 3375), (221, 3453), (224, 3465), (233, 3507), (249, 3558), (268, 3639), (276, 3681), (286, 3747), (290, 3762), (328, 3912),

Gene: Sourignavong_7 Start: 2648, Stop: 3808, Start Num: 21
Candidate Starts for Sourignavong_7:
(Start: 21 @2648 has 46 MA's), (56, 2738), (75, 2798), (80, 2807), (94, 2849), (97, 2864), (98, 2873), (107, 2906), (124, 2936), (132, 2963), (146, 2999), (149, 3008), (156, 3023), (176, 3089), (178, 3098), (186, 3140), (192, 3155), (197, 3176), (200, 3185), (207, 3209), (224, 3299), (245, 3392), (256, 3428), (260, 3440), (266, 3470), (269, 3479), (297, 3635), (310, 3689), (315, 3713), (329, 3773), (335, 3791),

Gene: Sputnik_4 Start: 2128, Stop: 3240, Start Num: 32
Candidate Starts for Sputnik_4:
(Start: 32 @2128 has 10 MA's), (55, 2170), (Start: 67 @2209 has 2 MA's), (Start: 69 @2215 has 15 MA's), (80, 2239), (89, 2257), (94, 2275), (102, 2311), (116, 2347), (156, 2449), (174, 2509), (184, 2545), (199, 2605), (207, 2632), (210, 2650), (228, 2746), (245, 2815), (263, 2872), (273, 2920), (286, 3007), (292, 3031), (298, 3067), (310, 3112), (315, 3136),

Gene: Stem_4 Start: 2698, Stop: 3825, Start Num: 27
Candidate Starts for Stem_4:
(Start: 27 @2698 has 128 MA's), (53, 2767), (Start: 67 @2803 has 2 MA's), (Start: 69 @2809 has 15 MA's), (79, 2833), (101, 2908), (135, 2980), (137, 2983), (139, 2989), (158, 3022), (165, 3058), (191, 3151), (193, 3154), (207, 3205), (221, 3283), (224, 3295), (233, 3337), (249, 3388), (268, 3469), (276, 3511), (286, 3577), (290, 3592), (328, 3742),

Gene: StewieGriff_6 Start: 2549, Stop: 3709, Start Num: 21
Candidate Starts for StewieGriff_6:
(Start: 21 @2549 has 46 MA's), (80, 2708), (82, 2717), (94, 2750), (107, 2807), (124, 2837), (131, 2861), (146, 2900), (149, 2909), (156, 2924), (178, 2999), (186, 3041), (192, 3056), (197, 3077), (198, 3080), (200, 3086), (206, 3107), (224, 3200), (245, 3293), (256, 3329), (266, 3371), (269, 3380), (297, 3536), (299, 3548), (310, 3590), (315, 3614), (329, 3674), (335, 3692),

Gene: Stratus_6 Start: 2621, Stop: 3781, Start Num: 21
Candidate Starts for Stratus_6:
(Start: 21 @2621 has 46 MA's), (56, 2711), (80, 2780), (94, 2822), (97, 2837), (98, 2846), (107, 2879), (124, 2909), (132, 2936), (146, 2972), (149, 2981), (156, 2996), (176, 3062), (186, 3113), (192, 3128),

(197, 3149), (200, 3158), (207, 3182), (224, 3272), (245, 3365), (256, 3401), (260, 3413), (266, 3443), (269, 3452), (297, 3608), (310, 3662), (315, 3686), (329, 3746), (335, 3764),

Gene: StrawberryLem_4 Start: 2100, Stop: 3245, Start Num: 21
Candidate Starts for StrawberryLem_4:
(Start: 21 @2100 has 46 MA's), (72, 2229), (94, 2286), (107, 2343), (112, 2352), (143, 2430), (146, 2436), (156, 2460), (163, 2487), (175, 2523), (185, 2574), (200, 2622), (206, 2643), (215, 2685), (220, 2721), (245, 2829), (256, 2865), (274, 2940), (278, 2967), (292, 3045), (297, 3072), (310, 3126), (315, 3150), (329, 3210), (335, 3228),

Gene: Swenson_6 Start: 2672, Stop: 3832, Start Num: 21
Candidate Starts for Swenson_6:
(Start: 21 @2672 has 46 MA's), (80, 2831), (82, 2840), (94, 2873), (107, 2930), (124, 2960), (131, 2984), (146, 3023), (149, 3032), (156, 3047), (178, 3122), (186, 3164), (197, 3200), (198, 3203), (200, 3209), (206, 3230), (224, 3323), (245, 3416), (256, 3452), (266, 3494), (269, 3503), (297, 3659), (299, 3671), (310, 3713), (315, 3737), (329, 3797), (335, 3815),

Gene: TailX7_3 Start: 1855, Stop: 2898, Start Num: 30
Candidate Starts for TailX7_3:
(Start: 30 @1855 has 1 MA's), (31, 1858), (Start: 32 @1864 has 10 MA's), (84, 1990), (94, 2014), (103, 2053), (127, 2113), (146, 2164), (155, 2185), (199, 2338), (207, 2365), (229, 2479), (253, 2569), (263, 2605), (270, 2641), (273, 2653), (278, 2686), (284, 2728), (301, 2809), (314, 2860),

Gene: Taj14_6 Start: 2528, Stop: 3688, Start Num: 21
Candidate Starts for Taj14_6:
(Start: 21 @2528 has 46 MA's), (80, 2687), (82, 2696), (94, 2729), (107, 2786), (124, 2816), (131, 2840), (146, 2879), (149, 2888), (156, 2903), (186, 3020), (197, 3056), (200, 3065), (206, 3086), (224, 3179), (245, 3272), (256, 3308), (266, 3350), (269, 3359), (297, 3515), (299, 3527), (310, 3569), (315, 3593), (329, 3653), (335, 3671),

Gene: TeddyBoy_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for TeddyBoy_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: TelAviv_29 Start: 15086, Stop: 16315, Start Num: 17
Candidate Starts for TelAviv_29:
(Start: 17 @15086 has 34 MA's), (50, 15179), (51, 15182), (65, 15224), (97, 15323), (104, 15356), (108, 15368), (118, 15383), (127, 15410), (129, 15419), (160, 15506), (163, 15515), (217, 15746), (236, 15833), (249, 15884), (257, 15920), (265, 15944), (274, 15992), (276, 16007), (293, 16106), (294, 16109), (313, 16190), (319, 16217), (323, 16232), (325, 16235), (334, 16259), (338, 16289), (340, 16310),

Gene: TimoTea_4 Start: 2647, Stop: 3774, Start Num: 27
Candidate Starts for TimoTea_4:
(Start: 27 @2647 has 128 MA's), (53, 2716), (Start: 69 @2758 has 15 MA's), (79, 2782), (101, 2857), (135, 2929), (137, 2932), (139, 2938), (158, 2971), (165, 3007), (191, 3100), (193, 3103), (207, 3154), (221, 3232), (224, 3244), (233, 3286), (249, 3337), (261, 3388), (268, 3418), (276, 3460), (290, 3541), (328, 3691),

Gene: TinoCrisci_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for TinoCrisci_6:

(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: TinyTruffula_4 Start: 2764, Stop: 3891, Start Num: 27
Candidate Starts for TinyTruffula_4:
(Start: 27 @2764 has 128 MA's), (53, 2833), (Start: 67 @2869 has 2 MA's), (Start: 69 @2875 has 15 MA's), (79, 2899), (101, 2974), (135, 3046), (137, 3049), (139, 3055), (158, 3088), (165, 3124), (191, 3217), (193, 3220), (207, 3271), (221, 3349), (224, 3361), (233, 3403), (249, 3454), (268, 3535), (276, 3577), (286, 3643), (290, 3658), (328, 3808),

Gene: TlaliMex_4 Start: 2758, Stop: 3885, Start Num: 27
Candidate Starts for TlaliMex_4:
(Start: 27 @2758 has 128 MA's), (53, 2827), (Start: 67 @2863 has 2 MA's), (Start: 69 @2869 has 15 MA's), (79, 2893), (101, 2968), (135, 3040), (137, 3043), (139, 3049), (158, 3082), (165, 3118), (191, 3211), (193, 3214), (207, 3265), (221, 3343), (224, 3355), (233, 3397), (249, 3448), (268, 3529), (276, 3571), (286, 3637), (290, 3652), (328, 3802),

Gene: TomBrady12_4 Start: 2698, Stop: 3825, Start Num: 27
Candidate Starts for TomBrady12_4:
(Start: 27 @2698 has 128 MA's), (53, 2767), (Start: 67 @2803 has 2 MA's), (Start: 69 @2809 has 15 MA's), (79, 2833), (101, 2908), (135, 2980), (137, 2983), (139, 2989), (158, 3022), (165, 3058), (191, 3151), (193, 3154), (207, 3205), (221, 3283), (224, 3295), (233, 3337), (249, 3388), (268, 3469), (276, 3511), (286, 3577), (290, 3592), (328, 3742),

Gene: Toulouse_5 Start: 2343, Stop: 3503, Start Num: 21
Candidate Starts for Toulouse_5:
(Start: 21 @2343 has 46 MA's), (56, 2433), (75, 2493), (80, 2502), (94, 2544), (97, 2559), (98, 2568), (107, 2601), (124, 2631), (132, 2658), (146, 2694), (149, 2703), (156, 2718), (176, 2784), (178, 2793), (186, 2835), (192, 2850), (197, 2871), (200, 2880), (207, 2904), (224, 2994), (245, 3087), (256, 3123), (260, 3135), (266, 3165), (269, 3174), (297, 3330), (310, 3384), (315, 3408), (329, 3468), (335, 3486),

Gene: Toxicola_4 Start: 2557, Stop: 3699, Start Num: 20
Candidate Starts for Toxicola_4:
(Start: 20 @2557 has 2 MA's), (Start: 27 @2572 has 128 MA's), (53, 2641), (Start: 69 @2683 has 15 MA's), (79, 2707), (101, 2782), (135, 2854), (137, 2857), (139, 2863), (158, 2896), (165, 2932), (179, 2980), (191, 3025), (193, 3028), (207, 3079), (221, 3157), (224, 3169), (233, 3211), (245, 3259), (249, 3262), (261, 3313), (268, 3343), (276, 3385), (281, 3427), (290, 3466), (328, 3616),

Gene: Trackstar_4 Start: 2764, Stop: 3891, Start Num: 27
Candidate Starts for Trackstar_4:
(Start: 27 @2764 has 128 MA's), (53, 2833), (Start: 67 @2869 has 2 MA's), (Start: 69 @2875 has 15 MA's), (79, 2899), (101, 2974), (135, 3046), (137, 3049), (139, 3055), (158, 3088), (165, 3124), (191, 3217), (193, 3220), (207, 3271), (221, 3349), (224, 3361), (233, 3403), (249, 3454), (268, 3535), (276, 3577), (286, 3643), (290, 3658), (328, 3808),

Gene: Trireme_4 Start: 2764, Stop: 3891, Start Num: 27
Candidate Starts for Trireme_4:
(Start: 27 @2764 has 128 MA's), (53, 2833), (Start: 67 @2869 has 2 MA's), (Start: 69 @2875 has 15 MA's), (79, 2899), (101, 2974), (135, 3046), (137, 3049), (139, 3055), (158, 3088), (165, 3124), (191, 3217), (193, 3220), (207, 3271), (221, 3349), (224, 3361), (233, 3403), (249, 3454), (268, 3535), (276, 3577), (286, 3643), (290, 3658), (328, 3808),

Gene: TymAbreu_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for TymAbreu_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (186, 3039), (192, 3054), (197, 3075), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (260, 3339), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Tyrellus_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Tyrellus_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Upsilon_4 Start: 2689, Stop: 3858, Start Num: 27
Candidate Starts for Upsilon_4:
(Start: 27 @2689 has 128 MA's), (53, 2758), (Start: 67 @2794 has 2 MA's), (Start: 69 @2800 has 15 MA's), (79, 2824), (101, 2899), (135, 2971), (137, 2974), (139, 2980), (158, 3013), (165, 3049), (191, 3142), (193, 3145), (207, 3196), (221, 3274), (224, 3286), (233, 3328), (249, 3379), (268, 3460), (276, 3502), (286, 3568), (290, 3583), (326, 3727), (328, 3733),

Gene: Utopia_2 Start: 2063, Stop: 3193, Start Num: 35
Candidate Starts for Utopia_2:
(Start: 35 @2063 has 5 MA's), (71, 2156), (86, 2198), (109, 2285), (203, 2591), (206, 2603), (208, 2612), (213, 2639), (222, 2687), (225, 2699), (263, 2852), (273, 2900), (275, 2918), (282, 2963), (291, 3002), (296, 3029), (298, 3044), (302, 3059), (304, 3065), (311, 3095),

Gene: Vagabond_32 Start: 14919, Stop: 16148, Start Num: 17
Candidate Starts for Vagabond_32:
(Start: 17 @14919 has 34 MA's), (50, 15012), (51, 15015), (65, 15057), (97, 15156), (104, 15189), (108, 15201), (118, 15216), (127, 15243), (129, 15252), (160, 15339), (163, 15348), (217, 15579), (236, 15666), (249, 15717), (257, 15753), (265, 15777), (274, 15825), (276, 15840), (293, 15939), (294, 15942), (313, 16023), (319, 16050), (323, 16065), (325, 16068), (334, 16092), (338, 16122), (340, 16143),

Gene: Vanisius_4 Start: 2671, Stop: 3798, Start Num: 27
Candidate Starts for Vanisius_4:
(Start: 27 @2671 has 128 MA's), (53, 2740), (Start: 67 @2776 has 2 MA's), (Start: 69 @2782 has 15 MA's), (79, 2806), (101, 2881), (135, 2953), (137, 2956), (139, 2962), (158, 2995), (165, 3031), (191, 3124), (193, 3127), (207, 3178), (221, 3256), (224, 3268), (233, 3310), (249, 3361), (268, 3442), (276, 3484), (290, 3565), (328, 3715),

Gene: Vinye_7 Start: 2541, Stop: 3701, Start Num: 21
Candidate Starts for Vinye_7:
(Start: 21 @2541 has 46 MA's), (28, 2559), (82, 2709), (94, 2742), (97, 2757), (107, 2799), (112, 2808), (124, 2829), (132, 2856), (143, 2886), (146, 2892), (149, 2901), (156, 2916), (178, 2991), (194, 3054), (197, 3069), (200, 3078), (206, 3099), (210, 3120), (211, 3123), (220, 3177), (245, 3285), (256, 3321), (266, 3363), (276, 3411), (297, 3528), (315, 3606), (318, 3621), (329, 3666), (335, 3684),

Gene: VitulaEligans_4 Start: 2740, Stop: 3867, Start Num: 27
Candidate Starts for VitulaEligans_4:
(Start: 20 @2725 has 2 MA's), (Start: 27 @2740 has 128 MA's), (53, 2809), (Start: 69 @2851 has 15 MA's), (79, 2875), (101, 2950), (135, 3022), (137, 3025), (139, 3031), (158, 3064), (191, 3193), (193,

3196), (207, 3247), (221, 3325), (224, 3337), (233, 3379), (249, 3430), (261, 3481), (268, 3511), (276, 3553), (290, 3634), (328, 3784),

Gene: Vorrps_31 Start: 14689, Stop: 15918, Start Num: 17
Candidate Starts for Vorrps_31:
(Start: 17 @14689 has 34 MA's), (50, 14782), (51, 14785), (65, 14827), (97, 14926), (104, 14959), (108, 14971), (118, 14986), (127, 15013), (129, 15022), (160, 15109), (163, 15118), (217, 15349), (236, 15436), (249, 15487), (257, 15523), (265, 15547), (274, 15595), (293, 15709), (294, 15712), (313, 15793), (319, 15820), (323, 15835), (325, 15838), (334, 15862), (338, 15892), (340, 15913),

Gene: Whytu_2 Start: 2029, Stop: 3159, Start Num: 35
Candidate Starts for Whytu_2:
(Start: 35 @2029 has 5 MA's), (71, 2122), (86, 2164), (109, 2251), (197, 2539), (202, 2554), (203, 2557), (206, 2569), (208, 2578), (213, 2605), (222, 2653), (225, 2665), (263, 2818), (273, 2866), (275, 2884), (296, 2995), (302, 3025), (304, 3031), (308, 3049), (311, 3061),

Gene: Wildflower_32 Start: 14675, Stop: 15904, Start Num: 17
Candidate Starts for Wildflower_32:
(Start: 17 @14675 has 34 MA's), (50, 14768), (51, 14771), (65, 14813), (97, 14912), (104, 14945), (108, 14957), (118, 14972), (127, 14999), (129, 15008), (160, 15095), (163, 15104), (217, 15335), (236, 15422), (249, 15473), (257, 15509), (265, 15533), (274, 15581), (293, 15695), (294, 15698), (304, 15740), (313, 15779), (319, 15806), (323, 15821), (325, 15824), (334, 15848), (338, 15878), (340, 15899),

Gene: Winget_33 Start: 15358, Stop: 16587, Start Num: 17
Candidate Starts for Winget_33:
(Start: 17 @15358 has 34 MA's), (50, 15451), (51, 15454), (65, 15496), (97, 15595), (104, 15628), (108, 15640), (118, 15655), (127, 15682), (129, 15691), (160, 15778), (163, 15787), (217, 16018), (236, 16105), (249, 16156), (257, 16192), (265, 16216), (274, 16264), (276, 16279), (293, 16378), (294, 16381), (313, 16462), (319, 16489), (323, 16504), (325, 16507), (334, 16531), (338, 16561), (340, 16582),

Gene: Witch_4 Start: 2660, Stop: 3787, Start Num: 27
Candidate Starts for Witch_4:
(Start: 27 @2660 has 128 MA's), (53, 2729), (Start: 69 @2771 has 15 MA's), (79, 2795), (101, 2870), (135, 2942), (137, 2945), (139, 2951), (158, 2984), (165, 3020), (191, 3113), (193, 3116), (207, 3167), (221, 3245), (224, 3257), (233, 3299), (249, 3350), (268, 3431), (276, 3473), (290, 3554), (328, 3704),

Gene: Wobbe_6 Start: 2584, Stop: 3678, Start Num: 49
Candidate Starts for Wobbe_6:
(Start: 37 @2551 has 7 MA's), (49, 2584), (62, 2620), (90, 2695), (97, 2728), (99, 2740), (105, 2764), (144, 2857), (150, 2872), (173, 2956), (186, 3019), (189, 3028), (192, 3034), (195, 3043), (196, 3052), (203, 3073), (220, 3163), (223, 3172), (230, 3208), (239, 3250), (247, 3301), (251, 3322), (263, 3361), (264, 3364), (270, 3397), (275, 3427), (297, 3544), (304, 3574),

Gene: Wogge42_31 Start: 14997, Stop: 16226, Start Num: 17
Candidate Starts for Wogge42_31:
(Start: 17 @14997 has 34 MA's), (50, 15090), (51, 15093), (65, 15135), (97, 15234), (104, 15267), (108, 15279), (118, 15294), (127, 15321), (129, 15330), (160, 15417), (163, 15426), (217, 15657), (236, 15744), (249, 15795), (257, 15831), (265, 15855), (274, 15903), (276, 15918), (293, 16017), (294, 16020), (313, 16101), (319, 16128), (323, 16143), (325, 16146), (334, 16170), (338, 16200), (340, 16221),

Gene: Wolfpack_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for Wolfpack_4:
(Start: 17 @2629 has 34 MA's), (Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 67 @2761 has 2 MA's), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (179, 3064), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: WorldChangers_2 Start: 1995, Stop: 3206, Start Num: 14
Candidate Starts for WorldChangers_2:
(14, 1995), (Start: 37 @2094 has 7 MA's), (48, 2124), (49, 2127), (85, 2217), (90, 2232), (92, 2238), (94, 2250), (104, 2298), (144, 2385), (150, 2400), (173, 2484), (177, 2499), (203, 2601), (213, 2649), (220, 2691), (222, 2697), (223, 2700), (246, 2814), (247, 2829), (256, 2871), (263, 2889), (264, 2892), (269, 2919), (270, 2925), (275, 2955), (276, 2958), (289, 3033), (297, 3072), (298, 3081), (303, 3099), (304, 3102),

Gene: Ximeno_4 Start: 2175, Stop: 3320, Start Num: 21
Candidate Starts for Ximeno_4:
(Start: 21 @2175 has 46 MA's), (72, 2304), (94, 2361), (107, 2418), (112, 2427), (143, 2505), (146, 2511), (156, 2535), (163, 2562), (175, 2598), (185, 2649), (200, 2697), (206, 2718), (215, 2760), (220, 2796), (245, 2904), (256, 2940), (274, 3015), (278, 3042), (292, 3120), (297, 3147), (310, 3201), (315, 3225), (329, 3285), (335, 3303),

Gene: Yami_4 Start: 2647, Stop: 3774, Start Num: 27
Candidate Starts for Yami_4:
(Start: 27 @2647 has 128 MA's), (53, 2716), (Start: 67 @2752 has 2 MA's), (Start: 69 @2758 has 15 MA's), (79, 2782), (101, 2857), (135, 2929), (137, 2932), (139, 2938), (158, 2971), (165, 3007), (191, 3100), (193, 3103), (207, 3154), (221, 3232), (224, 3244), (233, 3286), (249, 3337), (268, 3418), (276, 3460), (286, 3526), (290, 3541), (328, 3691),

Gene: Yank_6 Start: 2547, Stop: 3707, Start Num: 21
Candidate Starts for Yank_6:
(Start: 21 @2547 has 46 MA's), (56, 2637), (75, 2697), (80, 2706), (94, 2748), (97, 2763), (98, 2772), (107, 2805), (124, 2835), (132, 2862), (146, 2898), (149, 2907), (156, 2922), (176, 2988), (178, 2997), (186, 3039), (192, 3054), (200, 3084), (207, 3108), (224, 3198), (245, 3291), (256, 3327), (266, 3369), (269, 3378), (297, 3534), (310, 3588), (315, 3612), (329, 3672), (335, 3690),

Gene: Yasuo_4 Start: 2656, Stop: 3783, Start Num: 27
Candidate Starts for Yasuo_4:
(Start: 27 @2656 has 128 MA's), (53, 2725), (Start: 69 @2767 has 15 MA's), (79, 2791), (101, 2866), (135, 2938), (137, 2941), (139, 2947), (158, 2980), (165, 3016), (191, 3109), (193, 3112), (207, 3163), (221, 3241), (224, 3253), (233, 3295), (249, 3346), (268, 3427), (276, 3469), (290, 3550), (328, 3700),

Gene: Yavru_2 Start: 2070, Stop: 3203, Start Num: 35
Candidate Starts for Yavru_2:
(Start: 35 @2070 has 5 MA's), (71, 2163), (86, 2205), (109, 2292), (203, 2598), (206, 2610), (208, 2619), (222, 2694), (225, 2706), (263, 2859), (273, 2907), (275, 2925), (304, 3072), (308, 3090), (311, 3102),

Gene: YertPhresh_4 Start: 2659, Stop: 3786, Start Num: 27
Candidate Starts for YertPhresh_4:
(Start: 27 @2659 has 128 MA's), (53, 2728), (Start: 69 @2770 has 15 MA's), (79, 2794), (101, 2869), (135, 2941), (137, 2944), (139, 2950), (158, 2983), (165, 3019), (191, 3112), (193, 3115), (207, 3166), (221, 3244), (224, 3256), (233, 3298), (249, 3349), (268, 3430), (276, 3472), (290, 3553), (328, 3703),

Gene: YoyoKar_30 Start: 14642, Stop: 15871, Start Num: 17
Candidate Starts for YoyoKar_30:
(Start: 17 @14642 has 34 MA's), (50, 14735), (51, 14738), (65, 14780), (97, 14879), (104, 14912), (108, 14924), (118, 14939), (127, 14966), (129, 14975), (160, 15062), (163, 15071), (217, 15302), (236, 15389), (249, 15440), (257, 15476), (265, 15500), (274, 15548), (276, 15563), (293, 15662), (294, 15665), (313, 15746), (319, 15773), (323, 15788), (325, 15791), (334, 15815), (338, 15845), (340, 15866),

Gene: Yubaba_4 Start: 2660, Stop: 3787, Start Num: 27
Candidate Starts for Yubaba_4:
(Start: 27 @2660 has 128 MA's), (53, 2729), (Start: 69 @2771 has 15 MA's), (79, 2795), (101, 2870), (135, 2942), (137, 2945), (139, 2951), (158, 2984), (165, 3020), (191, 3113), (193, 3116), (207, 3167), (221, 3245), (224, 3257), (233, 3299), (249, 3350), (268, 3431), (276, 3473), (290, 3554), (328, 3704),

Gene: YungJamal_35 Start: 15421, Stop: 16650, Start Num: 17
Candidate Starts for YungJamal_35:
(Start: 17 @15421 has 34 MA's), (50, 15514), (51, 15517), (65, 15559), (97, 15658), (104, 15691), (108, 15703), (118, 15718), (127, 15745), (129, 15754), (160, 15841), (163, 15850), (217, 16081), (236, 16168), (249, 16219), (257, 16255), (265, 16279), (274, 16327), (276, 16342), (293, 16441), (294, 16444), (313, 16525), (319, 16552), (323, 16567), (325, 16570), (334, 16594), (338, 16624), (340, 16645),

Gene: Zahlia_4 Start: 2761, Stop: 3888, Start Num: 27
Candidate Starts for Zahlia_4:
(Start: 27 @2761 has 128 MA's), (53, 2830), (Start: 69 @2872 has 15 MA's), (79, 2896), (101, 2971), (135, 3043), (139, 3052), (158, 3085), (165, 3121), (191, 3214), (193, 3217), (207, 3268), (221, 3346), (224, 3358), (233, 3400), (249, 3451), (268, 3532), (276, 3574), (290, 3655), (328, 3805),

Gene: Zakhe101_32 Start: 14820, Stop: 16049, Start Num: 17
Candidate Starts for Zakhe101_32:
(Start: 17 @14820 has 34 MA's), (50, 14913), (51, 14916), (65, 14958), (97, 15057), (104, 15090), (108, 15102), (118, 15117), (127, 15144), (129, 15153), (160, 15240), (163, 15249), (217, 15480), (236, 15567), (249, 15618), (257, 15654), (265, 15678), (274, 15726), (276, 15741), (293, 15840), (294, 15843), (313, 15924), (319, 15951), (323, 15966), (325, 15969), (334, 15993), (338, 16023), (340, 16044),

Gene: Zebo_32 Start: 15092, Stop: 16321, Start Num: 17
Candidate Starts for Zebo_32:
(Start: 17 @15092 has 34 MA's), (50, 15185), (51, 15188), (65, 15230), (97, 15329), (104, 15362), (108, 15374), (118, 15389), (127, 15416), (129, 15425), (160, 15512), (163, 15521), (217, 15752), (236, 15839), (249, 15890), (257, 15926), (265, 15950), (274, 15998), (276, 16013), (293, 16112), (294, 16115), (313, 16196), (319, 16223), (323, 16238), (325, 16241), (334, 16265), (338, 16295), (340, 16316),