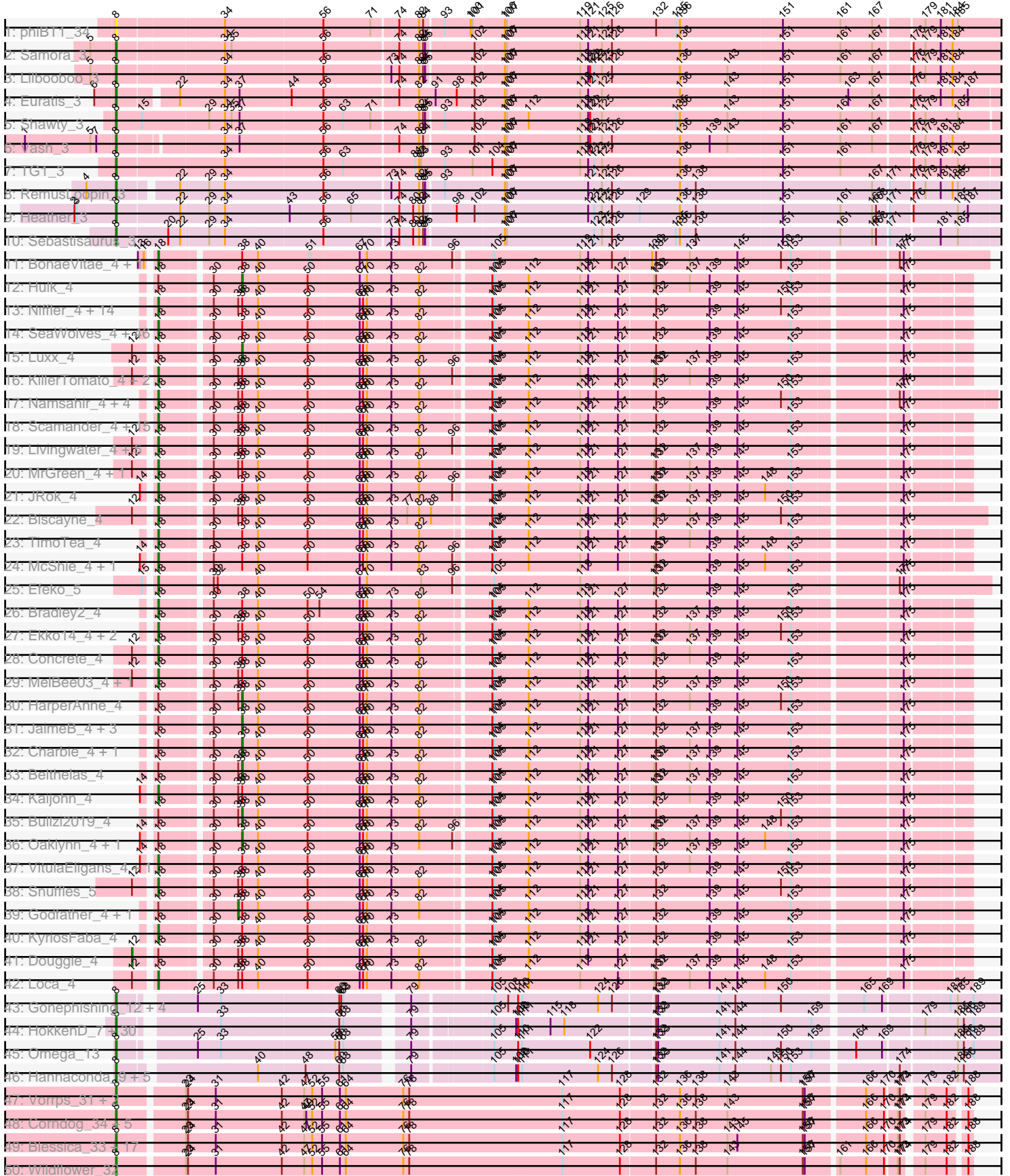


Pham 193725



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 193725 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 193725 has 220 members, 14 are drafts.

Phages represented in each track:

- Track 1 : phiBT1_34
- Track 2 : Samora_3
- Track 3 : Lilbooboo_3
- Track 4 : Euratis_3
- Track 5 : Shawty_3
- Track 6 : Vash_3
- Track 7 : TG1_3
- Track 8 : RemusLoopin_3
- Track 9 : Heather_3
- Track 10 : Sebastisaurus_3
- Track 11 : BonaeVitae_4, Naby_4
- Track 12 : Hulk_4
- Track 13 : Niffler_4, Nobel_4, Slizam_4, Miaurora_4, JooneeDee_4, Lunatic_4, Trireme_4, TomBrady12_4, Clownery_4, Bintii_4, Cazares_4, PuffyCat_4, Stem_4, TinyTruffula_4, Yami_4
- Track 14 : SeaWolves_4, Majesty_4, Alucard_4, Goobery_4, Picnic_4, Erin_4, Baine_4, Scrunchy_4, Lola20_4, ManAs_4, LemonPepper_4, Jahseh_4, Eightball_4, Horacetta_4, Gabbspett_4, Gillker_4, Owens_4, Gardevoir_4, Aztec_4, Cayde6_4, Dooby_4, Jannah_4, Dongwon_4, TeddyBoy_4, JoBros_4, LionelHutz_4, GoldenBlanche_4, Witch_4, Sara_4, NeumannU_4, Slentz_4, Yasuo_4, Puddles3_4, PaoPu_4, BinkBonk_4, Anseraureola_4, Yubaba_4, BurtonThePup_4, Minima_4, BarBear_4, Pondwater_4, YertPhresh_4, Octopus_4, Chatham_4, Danimal_4, EdElric_4, Ciel_4
- Track 15 : Luxx_4
- Track 16 : KillerTomato_4, Bri160_4, BoomRoasted_4
- Track 17 : Namsahir_4, Upsilon_4, PoRanda_4, MirimarMandM_4, Publix_4
- Track 18 : Scamander_4, RoscoWindex_4, Avvas_4, SantasSleigh_4, MasterPitts_4, Otwor_4, LaviMo_4, Burgy_4, Danno_4, Josuke_4, Sage7_4, Rhysand_4, Aries55_4, Cheesecake_4, Vanisius_4, DaftyDuck_4
- Track 19 : Livingwater_4, Sippinontea_4, Quaker_4, Bodhi17_4, Wolfpack_4, KayPaulus_4
- Track 20 : MrGreen_4, Leafy_4
- Track 21 : JRok_4

- Track 22 : Biscayne_4
- Track 23 : TimoTea_4
- Track 24 : McShie_4, BrokMonster_4
- Track 25 : Efeko_5
- Track 26 : Bradley2_4
- Track 27 : Ekko14_4, Elspeth_4, Noelani_4
- Track 28 : Concrete_4
- Track 29 : MelBee03_4, Kevanna_4
- Track 30 : HarperAnne_4
- Track 31 : JaimeB_4, Astro16_4, Rhogar_4, Hernandez44_4
- Track 32 : Charbie_4, Maneater_4
- Track 33 : Belthelas_4
- Track 34 : Kaijohn_4
- Track 35 : Bullzi2019_4
- Track 36 : Oaklynn_4, Azizam_4
- Track 37 : VitulaEligans_4, Jerky_4
- Track 38 : Snuffles_5
- Track 39 : Godfather_4, Kojax4_4
- Track 40 : KyriosFaba_4
- Track 41 : Douggie_4
- Track 42 : Loca_4
- Track 43 : Gonephishing_12, Ariel_11, LittleE_11, Squint_12, Lucky2013_12
- Track 44 : HokkenD_7, BAKA_8, Duke13_8, Bombitas_9, Phoebus_12, Dove_9, Ejimix_13, Minerva_11, Schatzie_10, Pound_11, EricMillard_12, Beem_12, Odette_11, NihilNomen_11, Hughesyang_11, DmpstrDiver_11, Klein_12, JuicyJay_13, Bobby_13, Optimus_9, Bagrid_10, Zelink_12, Yeet_10, Kalah2_12, Wanda_12, Dallas_11, Halley_12, Thibault_8, Constella_7, ThreeRngTarjay_11, Redno2_11
- Track 45 : Omega_13
- Track 46 : Hannaconda_9, Porcelain_12, Courthouse_12, KashFlow_6, MiaZeal_12, Superphikiman_12
- Track 47 : Vorrps_31, Mori_31, Smooch_34
- Track 48 : Corndog_34, Murai_32, NiebruSaylor_31, Shida_32, Schuy_33, Krili_31
- Track 49 : Blessica_33, YungJamal_35, Bora_29, MadKillah_33, Ashwin_33, Idergollasper_32, Zakhe101_32, Familton_33, Firecracker_32, Dylan_31, Catdawg_32, SchoolBus_32, Winget_33, FoulBall_32, TelAviv_29, JangDynasty_32, Alkhayr_30, Vagabond_30
- Track 50 : Wildflower_32
- Track 51 : Ryadel_35
- Track 52 : Bipper_11, Cracklewink_11
- Track 53 : AuntGwenStacy_11, Hilltopfarm_11, Typha_11
- Track 54 : Barebow_3
- Track 55 : MooMoo_3

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

The start number called the most often in the published annotations is 18, it was called in 109 of the 206 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, Dongwon_4, Dooby_4, EdElric_4, Efeko_5, Eightball_4, Ekko14_4, Elspeth_4, Erin_4, Gabbspett_4, Gardevoir_4, Gillker_4, GoldenBlanche_4, Goobery_4, Horacetta_4, JRok_4, Jahseh_4, Jannah_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, McShie_4, MelBee03_4, Miaurora_4, Minima_4, MirimarMandM_4, MrGreen_4, Naby_4, Namsahir_4, NeumannU_4, Niffler_4, Nobel_4, Noelani_4, Octopus_4, Otwor_4, Owens_4, PaoPu_4, Picnic_4, PoRanda_4, Pondwater_4, Publix_4, Puddles3_4, PuffyCat_4, Quaker_4, Rhysand_4, RoscoWindex_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, TomBrady12_4, Ttrireme_4, Upsilon_4, Vanisius_4, VitulaEligans_4, Witch_4, Wolfpack_4, Yami_4, Yasuo_4, YertPhresh_4, Yubaba_4,

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

- 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, Maneater_4, Oaklynn_4, Rhogar_4,

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

- Alkhayr_30, Ariel_11, Ashwin_33, AuntGwenStacy_11, BAKA_8, Bagrid_10, Barebow_3, Beem_12, Bipper_11, Blessica_33, Bobby_13, Bombitas_9, Bora_29, Catdawg_32, Constella_7, Corndog_34, Courthouse_12, Cracklewink_11, Dallas_11, DmpstrDiver_11, Dove_9, Duke13_8, Dylan_31, Ejimix_13, EricMillard_12, Euratis_3, Familton_33, Firecracker_32, FoulBall_32, Gonephishing_12, Halley_12, Hannaconda_9, Heather_3, Hilltopfarm_11, HokkenD_7, Hughesyang_11, Idergollasper_32, JangDynasty_32, JuicyJay_13, Kalah2_12, KashFlow_6, Klein_12, Krili_31, Lilbooboo_3, LittleE_11, Lucky2013_12, MadKillah_33, MiaZeal_12, Minerva_11, MooMoo_3, Mori_31, Murai_32, NiebruSaylor_31, NihilNomen_11, Odette_11, Omega_13, Optimus_9, Phoebus_12, Porcelain_12, Pound_11, Redno2_11, RemusLoopin_3, Ryadel_35, Samora_3, Schatzie_10, SchoolBus_32, Schuy_33, Sebastisaurus_3, Shawty_3, Shida_32, Smooch_34, Squint_12, Superphikiman_12, TG1_3, TelAviv_29, Thibault_8, ThreeRngTarjay_11, Typha_11, Vagabond_30, Vash_3, Vorrrps_31, Wanda_12, Wildflower_32, Winget_33, Yeet_10, YungJamal_35, Zakhe101_32, Zelink_12, phiBT1_34,

Summary by start number:

Start 8:

- Found in 88 of 220 (40.0%) of genes in pham
- Manual Annotations of this start: 81 of 206
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alkhayr_30 (O), Ariel_11 (J), Ashwin_33 (O), AuntGwenStacy_11 (Y), BAKA_8 (J), Bagrid_10 (J), Beem_12 (J), Bipper_11 (Y), Blessica_33 (O), Bobby_13 (J), Bombitas_9 (J), Bora_29 (O), Catdawg_32 (O), Constella_7 (J), Corndog_34 (O), Courthouse_12 (J), Cracklewink_11 (Y), Dallas_11 (J), DmpstrDiver_11 (J), Dove_9 (J), Duke13_8 (J), Dylan_31 (O), Ejimix_13 (J), EricMillard_12 (J), Euratis_3 (BB1), Familton_33 (O), Firecracker_32 (O), FoulBall_32

(O), Gonephishing_12 (J), Halley_12 (J), Hannaconda_9 (J), Heather_3 (BB2), Hilltopfarm_11 (Y), HokkenD_7 (J), Hughesyang_11 (J), Idergollasper_32 (O), JangDynasty_32 (O), JuicyJay_13 (J), Kalah2_12 (J), KashFlow_6 (J), Klein_12 (J), Krili_31 (O), Lilbooboo_3 (BB1), LittleE_11 (J), Lucky2013_12 (J), MadKillah_33 (O), MiaZeal_12 (J), Minerva_11 (J), MooMoo_3 (singleton), Mori_31 (O), Murai_32 (O), NiebruSaylor_31 (O), NihilNomen_11 (J), Odette_11 (J), Omega_13 (J), Optimus_9 (J), Phoebus_12 (J), Porcelain_12 (J), Pound_11 (J), Redno2_11 (J), RemusLoopin_3 (BB2), Ryadel_35 (O), Samora_3 (BB1), Schatzie_10 (J), SchoolBus_32 (O), Schuy_33 (O), Sebastisaurus_3 (BB2), Shawty_3 (BB1), Shida_32 (O), Smooch_34 (O), Squint_12 (J), Superphikiman_12 (J), TG1_3 (BB1), TelAviv_29 (O), Thibault_8 (J), ThreeRngTarjay_11 (J), Typha_11 (Y), Vagabond_30 (O), Vash_3 (BB1), Vorrps_31 (O), Wanda_12 (J), Wildflower_32 (O), Winget_33 (O), Yeet_10 (J), YungJamal_35 (O), Zakhe101_32 (O), Zelink_12 (J), phiBT1_34 (BB1),

Start 12:

- Found in 19 of 220 (8.6%) of genes in pham
- Manual Annotations of this start: 1 of 206
- Called 5.3% of time when present
- Phage (with cluster) where this start called: Douggie_4 (EE),

Start 17:

- Found in 1 of 220 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barebow_3 (singleton),

Start 18:

- Found in 131 of 220 (59.5%) of genes in pham
- Manual Annotations of this start: 109 of 206
- Called 87.8% 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), Dongwon_4 (EE), Dooby_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), Horacetta_4 (EE), JRok_4 (EE), Jahseh_4 (EE), Jannah_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), McShie_4 (EE), MelBee03_4 (EE), Miaurora_4 (EE), Minima_4 (EE), MirimarMandM_4 (EE), MrGreen_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), Picnic_4 (EE), PoRanda_4 (EE), Pondwater_4 (EE), Publix_4 (EE), Puddles3_4 (EE), PuffyCat_4 (EE), Quaker_4 (EE), Rhysand_4 (EE), RoscoWindex_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),

TomBrady12_4 (EE), Trireme_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),

Start 36:

- Found in 62 of 220 (28.2%) of genes in pham
- Manual Annotations of this start: 2 of 206
- Called 3.2% of time when present
- Phage (with cluster) where this start called: Godfather_4 (EE), Kojax4_4 (EE),

Start 38:

- Found in 130 of 220 (59.1%) of genes in pham
- Manual Annotations of this start: 13 of 206
- Called 10.0% 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), Maneater_4 (EE), Oaklynn_4 (EE), Rhogar_4 (EE),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, EE, J, O, Y, BB2, BB1,

Info for manual annotations of cluster BB1:

- Start number 8 was manually annotated 6 times for cluster BB1.

Info for manual annotations of cluster BB2:

- Start number 8 was manually annotated 3 times for cluster BB2.

Info for manual annotations of cluster EE:

- Start number 12 was manually annotated 1 time for cluster EE.
- Start number 18 was manually annotated 109 times for cluster EE.
- Start number 36 was manually annotated 2 times for cluster EE.
- Start number 38 was manually annotated 13 times for cluster EE.

Info for manual annotations of cluster J:

- Start number 8 was manually annotated 40 times for cluster J.

Info for manual annotations of cluster O:

- Start number 8 was manually annotated 27 times for cluster O.

Info for manual annotations of cluster Y:

- Start number 8 was manually annotated 4 times for cluster Y.

Gene Information:

Gene: Alkhayr_30 Start: 15001, Stop: 16230, Start Num: 8

Candidate Starts for Alkhayr_30:

(Start: 8 @15001 has 81 MA's), (23, 15094), (24, 15097), (31, 15139), (42, 15238), (47, 15271), (52, 15283), (55, 15298), (61, 15325), (64, 15334), (76, 15421), (78, 15430), (117, 15661), (128, 15748), (132, 15799), (136, 15835), (138, 15859), (143, 15907), (145, 15922), (156, 16021), (157, 16024),

(166, 16105), (170, 16132), (173, 16147), (174, 16150), (179, 16174), (182, 16204), (188, 16225),

Gene: Alucard_4 Start: 2660, Stop: 3787, Start Num: 18

Candidate Starts for Alucard_4:

(Start: 18 @2660 has 109 MA's), (30, 2729), (Start: 38 @2771 has 13 MA's), (40, 2795), (50, 2870), (67, 2942), (68, 2945), (70, 2951), (73, 2984), (82, 3020), (104, 3113), (105, 3116), (112, 3167), (119, 3245), (121, 3257), (127, 3299), (132, 3350), (139, 3431), (145, 3473), (153, 3554), (175, 3704),

Gene: Anseraureola_4 Start: 2683, Stop: 3810, Start Num: 18

Candidate Starts for Anseraureola_4:

(Start: 18 @2683 has 109 MA's), (30, 2752), (Start: 38 @2794 has 13 MA's), (40, 2818), (50, 2893), (67, 2965), (68, 2968), (70, 2974), (73, 3007), (82, 3043), (104, 3136), (105, 3139), (112, 3190), (119, 3268), (121, 3280), (127, 3322), (132, 3373), (139, 3454), (145, 3496), (153, 3577), (175, 3727),

Gene: Ariel_11 Start: 4635, Stop: 5864, Start Num: 8

Candidate Starts for Ariel_11:

(Start: 8 @4635 has 81 MA's), (25, 4728), (33, 4761), (60, 4932), (62, 4935), (63, 4938), (79, 5016), (105, 5127), (108, 5148), (110, 5163), (111, 5169), (124, 5283), (126, 5304), (132, 5361), (133, 5364), (141, 5457), (144, 5481), (150, 5547), (165, 5658), (169, 5685), (183, 5769), (185, 5778), (189, 5802),

Gene: Aries55_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Aries55_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Ashwin_33 Start: 15011, Stop: 16240, Start Num: 8

Candidate Starts for Ashwin_33:

(Start: 8 @15011 has 81 MA's), (23, 15104), (24, 15107), (31, 15149), (42, 15248), (47, 15281), (52, 15293), (55, 15308), (61, 15335), (64, 15344), (76, 15431), (78, 15440), (117, 15671), (128, 15758), (132, 15809), (136, 15845), (138, 15869), (143, 15917), (145, 15932), (156, 16031), (157, 16034), (166, 16115), (170, 16142), (173, 16157), (174, 16160), (179, 16184), (182, 16214), (188, 16235),

Gene: Astro16_4 Start: 2782, Stop: 3798, Start Num: 38

Candidate Starts for Astro16_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: AuntGwenStacy_11 Start: 6484, Stop: 7815, Start Num: 8

Candidate Starts for AuntGwenStacy_11:

(Start: 8 @6484 has 81 MA's), (9, 6490), (10, 6493), (19, 6541), (28, 6598), (33, 6619), (37, 6646), (46, 6739), (60, 6790), (62, 6793), (63, 6796), (79, 6895), (84, 6913), (89, 6922), (92, 6928), (96, 6949), (105, 7009), (111, 7051), (121, 7150), (126, 7186), (127, 7195), (128, 7198), (132, 7243), (133, 7246), (141, 7339), (144, 7363), (154, 7453), (158, 7471), (159, 7474), (173, 7585), (179, 7621), (183, 7654), (185, 7663), (190, 7699),

Gene: Avvas_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Avvas_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484),

(153, 3565), (175, 3715),

Gene: Azizam_4 Start: 2770, Stop: 3786, Start Num: 38

Candidate Starts for Azizam_4:

(14, 2644), (Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (96, 3067), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (131, 3346), (132, 3349), (137, 3400), (139, 3430), (145, 3472), (148, 3514), (153, 3553), (175, 3703),

Gene: Aztec_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Aztec_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: BAKA_8 Start: 5468, Stop: 6691, Start Num: 8

Candidate Starts for BAKA_8:

(Start: 8 @5468 has 81 MA's), (33, 5594), (60, 5765), (63, 5771), (79, 5849), (105, 5954), (109, 5987), (110, 5990), (111, 5996), (115, 6038), (118, 6059), (132, 6188), (133, 6191), (141, 6284), (144, 6308), (159, 6419), (179, 6566), (185, 6605), (186, 6614), (189, 6629),

Gene: Bagrid_10 Start: 5265, Stop: 6488, Start Num: 8

Candidate Starts for Bagrid_10:

(Start: 8 @5265 has 81 MA's), (33, 5391), (60, 5562), (63, 5568), (79, 5646), (105, 5751), (109, 5784), (110, 5787), (111, 5793), (115, 5835), (118, 5856), (132, 5985), (133, 5988), (141, 6081), (144, 6105), (159, 6216), (179, 6363), (185, 6402), (186, 6411), (189, 6426),

Gene: Baine_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for Baine_4:

(Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: BarBear_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for BarBear_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Barebow_3 Start: 1899, Stop: 3107, Start Num: 17

Candidate Starts for Barebow_3:

(17, 1899), (27, 1971), (41, 2049), (45, 2103), (59, 2166), (67, 2196), (87, 2289), (104, 2373), (108, 2397), (126, 2550), (134, 2616), (142, 2700), (150, 2790), (177, 2970),

Gene: Beem_12 Start: 5831, Stop: 7054, Start Num: 8

Candidate Starts for Beem_12:

(Start: 8 @5831 has 81 MA's), (33, 5957), (60, 6128), (63, 6134), (79, 6212), (105, 6317), (109, 6350), (110, 6353), (111, 6359), (115, 6401), (118, 6422), (132, 6551), (133, 6554), (141, 6647), (144, 6671), (159, 6782), (179, 6929), (185, 6968), (186, 6977), (189, 6992),

Gene: Belthelas_4 Start: 2821, Stop: 3837, Start Num: 38

Candidate Starts for Belthelas_4:

(Start: 18 @2710 has 109 MA's), (30, 2779), (Start: 36 @2815 has 2 MA's), (Start: 38 @2821 has 13 MA's), (40, 2845), (50, 2920), (67, 2992), (68, 2995), (70, 3001), (73, 3034), (82, 3070), (104, 3163), (105, 3166), (112, 3217), (119, 3295), (121, 3307), (127, 3349), (131, 3397), (132, 3400), (137, 3451), (139, 3481), (145, 3523), (153, 3604), (175, 3754),

Gene: BinkBonk_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for BinkBonk_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Bintii_4 Start: 2689, Stop: 3816, Start Num: 18

Candidate Starts for Bintii_4:

(Start: 18 @2689 has 109 MA's), (30, 2758), (Start: 36 @2794 has 2 MA's), (Start: 38 @2800 has 13 MA's), (40, 2824), (50, 2899), (67, 2971), (68, 2974), (70, 2980), (73, 3013), (82, 3049), (104, 3142), (105, 3145), (112, 3196), (119, 3274), (121, 3286), (127, 3328), (132, 3379), (139, 3460), (145, 3502), (150, 3568), (153, 3583), (175, 3733),

Gene: Bipper_11 Start: 6524, Stop: 7870, Start Num: 8

Candidate Starts for Bipper_11:

(Start: 8 @6524 has 81 MA's), (25, 6623), (33, 6656), (37, 6683), (39, 6689), (44, 6761), (60, 6830), (63, 6836), (75, 6920), (79, 6935), (96, 6989), (99, 7007), (105, 7049), (111, 7091), (114, 7127), (121, 7190), (128, 7238), (140, 7373), (141, 7379), (144, 7403), (152, 7481), (155, 7496), (158, 7511), (183, 7694), (185, 7703), (186, 7712),

Gene: Biscayne_4 Start: 2687, Stop: 3844, Start Num: 18

Candidate Starts for Biscayne_4:

(Start: 12 @2660 has 1 MA's), (Start: 18 @2687 has 109 MA's), (30, 2756), (Start: 36 @2792 has 2 MA's), (Start: 38 @2798 has 13 MA's), (40, 2822), (50, 2897), (67, 2969), (68, 2972), (70, 2978), (73, 3011), (77, 3032), (82, 3047), (88, 3065), (104, 3140), (105, 3143), (112, 3194), (119, 3272), (121, 3284), (127, 3326), (131, 3374), (132, 3377), (137, 3428), (139, 3458), (145, 3500), (150, 3566), (153, 3581), (175, 3731),

Gene: Blessica_33 Start: 15402, Stop: 16631, Start Num: 8

Candidate Starts for Blessica_33:

(Start: 8 @15402 has 81 MA's), (23, 15495), (24, 15498), (31, 15540), (42, 15639), (47, 15672), (52, 15684), (55, 15699), (61, 15726), (64, 15735), (76, 15822), (78, 15831), (117, 16062), (128, 16149), (132, 16200), (136, 16236), (138, 16260), (143, 16308), (145, 16323), (156, 16422), (157, 16425), (166, 16506), (170, 16533), (173, 16548), (174, 16551), (179, 16575), (182, 16605), (188, 16626),

Gene: Bobby_13 Start: 5558, Stop: 6781, Start Num: 8

Candidate Starts for Bobby_13:

(Start: 8 @5558 has 81 MA's), (33, 5684), (60, 5855), (63, 5861), (79, 5939), (105, 6044), (109, 6077), (110, 6080), (111, 6086), (115, 6128), (118, 6149), (132, 6278), (133, 6281), (141, 6374), (144, 6398), (159, 6509), (179, 6656), (185, 6695), (186, 6704), (189, 6719),

Gene: Bodhi17_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for Bodhi17_4:

(Start: 12 @2629 has 1 MA's), (Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 36 @2761 has 2 MA's), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (96, 3064), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: Bombitas_9 Start: 5140, Stop: 6363, Start Num: 8

Candidate Starts for Bombitas_9:

(Start: 8 @5140 has 81 MA's), (33, 5266), (60, 5437), (63, 5443), (79, 5521), (105, 5626), (109, 5659), (110, 5662), (111, 5668), (115, 5710), (118, 5731), (132, 5860), (133, 5863), (141, 5956), (144, 5980), (159, 6091), (179, 6238), (185, 6277), (186, 6286), (189, 6301),

Gene: BonaeVitae_4 Start: 2373, Stop: 3533, Start Num: 18

Candidate Starts for BonaeVitae_4:

(13, 2355), (16, 2364), (Start: 18 @2373 has 109 MA's), (Start: 38 @2484 has 13 MA's), (40, 2508), (51, 2586), (67, 2655), (70, 2664), (73, 2697), (96, 2781), (105, 2829), (119, 2958), (121, 2970), (126, 3003), (130, 3057), (132, 3063), (137, 3114), (145, 3186), (150, 3252), (153, 3267), (174, 3411), (175, 3417),

Gene: BoomRoasted_4 Start: 2710, Stop: 3837, Start Num: 18

Candidate Starts for BoomRoasted_4:

(Start: 12 @2683 has 1 MA's), (Start: 18 @2710 has 109 MA's), (30, 2779), (Start: 36 @2815 has 2 MA's), (Start: 38 @2821 has 13 MA's), (40, 2845), (50, 2920), (67, 2992), (68, 2995), (70, 3001), (73, 3034), (82, 3070), (96, 3118), (104, 3163), (105, 3166), (112, 3217), (119, 3295), (121, 3307), (127, 3349), (131, 3397), (132, 3400), (137, 3451), (139, 3481), (145, 3523), (153, 3604), (175, 3754),

Gene: Bora_29 Start: 14464, Stop: 15693, Start Num: 8

Candidate Starts for Bora_29:

(Start: 8 @14464 has 81 MA's), (23, 14557), (24, 14560), (31, 14602), (42, 14701), (47, 14734), (52, 14746), (55, 14761), (61, 14788), (64, 14797), (76, 14884), (78, 14893), (117, 15124), (128, 15211), (132, 15262), (136, 15298), (138, 15322), (143, 15370), (145, 15385), (156, 15484), (157, 15487), (166, 15568), (170, 15595), (173, 15610), (174, 15613), (179, 15637), (182, 15667), (188, 15688),

Gene: Bradley2_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Bradley2_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (54, 2887), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Bri160_4 Start: 2710, Stop: 3837, Start Num: 18

Candidate Starts for Bri160_4:

(Start: 12 @2683 has 1 MA's), (Start: 18 @2710 has 109 MA's), (30, 2779), (Start: 36 @2815 has 2 MA's), (Start: 38 @2821 has 13 MA's), (40, 2845), (50, 2920), (67, 2992), (68, 2995), (70, 3001), (73, 3034), (82, 3070), (96, 3118), (104, 3163), (105, 3166), (112, 3217), (119, 3295), (121, 3307), (127, 3349), (131, 3397), (132, 3400), (137, 3451), (139, 3481), (145, 3523), (153, 3604), (175, 3754),

Gene: BrokMonster_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for BrokMonster_4:

(14, 2641), (Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (96, 3064), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (131, 3343), (132, 3346), (139, 3427), (145, 3469), (148, 3511), (153, 3550), (175, 3700),

Gene: Bullzi2019_4 Start: 2791, Stop: 3807, Start Num: 38

Candidate Starts for Bullzi2019_4:

(Start: 18 @2680 has 109 MA's), (30, 2749), (Start: 36 @2785 has 2 MA's), (Start: 38 @2791 has 13 MA's), (40, 2815), (50, 2890), (67, 2962), (68, 2965), (70, 2971), (73, 3004), (82, 3040), (104, 3133), (105, 3136), (112, 3187), (119, 3265), (121, 3277), (127, 3319), (132, 3370), (139, 3451), (145, 3493),

(150, 3559), (153, 3574), (175, 3724),

Gene: Burgy_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Burgy_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: BurtonThePup_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for BurtonThePup_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Catdawg_32 Start: 15091, Stop: 16320, Start Num: 8

Candidate Starts for Catdawg_32:

(Start: 8 @15091 has 81 MA's), (23, 15184), (24, 15187), (31, 15229), (42, 15328), (47, 15361), (52, 15373), (55, 15388), (61, 15415), (64, 15424), (76, 15511), (78, 15520), (117, 15751), (128, 15838), (132, 15889), (136, 15925), (138, 15949), (143, 15997), (145, 16012), (156, 16111), (157, 16114), (166, 16195), (170, 16222), (173, 16237), (174, 16240), (179, 16264), (182, 16294), (188, 16315),

Gene: Cayde6_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for Cayde6_4:

(Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: Cazares_4 Start: 2647, Stop: 3774, Start Num: 18

Candidate Starts for Cazares_4:

(Start: 18 @2647 has 109 MA's), (30, 2716), (Start: 36 @2752 has 2 MA's), (Start: 38 @2758 has 13 MA's), (40, 2782), (50, 2857), (67, 2929), (68, 2932), (70, 2938), (73, 2971), (82, 3007), (104, 3100), (105, 3103), (112, 3154), (119, 3232), (121, 3244), (127, 3286), (132, 3337), (139, 3418), (145, 3460), (150, 3526), (153, 3541), (175, 3691),

Gene: Charbie_4 Start: 2758, Stop: 3774, Start Num: 38

Candidate Starts for Charbie_4:

(Start: 18 @2647 has 109 MA's), (30, 2716), (Start: 38 @2758 has 13 MA's), (40, 2782), (50, 2857), (67, 2929), (68, 2932), (70, 2938), (73, 2971), (82, 3007), (104, 3100), (105, 3103), (112, 3154), (119, 3232), (121, 3244), (127, 3286), (132, 3337), (137, 3388), (139, 3418), (145, 3460), (153, 3541), (175, 3691),

Gene: Chatham_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Chatham_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Cheesecake_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Cheesecake_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484),

(153, 3565), (175, 3715),

Gene: Ciel_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Ciel_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Clownery_4 Start: 2764, Stop: 3891, Start Num: 18

Candidate Starts for Clownery_4:

(Start: 18 @2764 has 109 MA's), (30, 2833), (Start: 36 @2869 has 2 MA's), (Start: 38 @2875 has 13 MA's), (40, 2899), (50, 2974), (67, 3046), (68, 3049), (70, 3055), (73, 3088), (82, 3124), (104, 3217), (105, 3220), (112, 3271), (119, 3349), (121, 3361), (127, 3403), (132, 3454), (139, 3535), (145, 3577), (150, 3643), (153, 3658), (175, 3808),

Gene: Concrete_4 Start: 2710, Stop: 3837, Start Num: 18

Candidate Starts for Concrete_4:

(Start: 12 @2683 has 1 MA's), (Start: 18 @2710 has 109 MA's), (30, 2779), (Start: 38 @2821 has 13 MA's), (40, 2845), (50, 2920), (67, 2992), (68, 2995), (70, 3001), (73, 3034), (82, 3070), (104, 3163), (105, 3166), (112, 3217), (119, 3295), (121, 3307), (127, 3349), (131, 3397), (132, 3400), (137, 3451), (139, 3481), (145, 3523), (153, 3604), (175, 3754),

Gene: Constella_7 Start: 4649, Stop: 5872, Start Num: 8

Candidate Starts for Constella_7:

(Start: 8 @4649 has 81 MA's), (33, 4775), (60, 4946), (63, 4952), (79, 5030), (105, 5135), (109, 5168), (110, 5171), (111, 5177), (115, 5219), (118, 5240), (132, 5369), (133, 5372), (141, 5465), (144, 5489), (159, 5600), (179, 5747), (185, 5786), (186, 5795), (189, 5810),

Gene: Corndog_34 Start: 15549, Stop: 16778, Start Num: 8

Candidate Starts for Corndog_34:

(Start: 8 @15549 has 81 MA's), (23, 15642), (24, 15645), (31, 15687), (42, 15786), (47, 15819), (49, 15822), (52, 15831), (55, 15846), (61, 15873), (64, 15882), (76, 15969), (78, 15978), (117, 16209), (128, 16296), (132, 16347), (136, 16383), (138, 16407), (143, 16455), (156, 16569), (157, 16572), (166, 16653), (170, 16680), (173, 16695), (174, 16698), (179, 16722), (182, 16752), (188, 16773),

Gene: Courthouse_12 Start: 5434, Stop: 6669, Start Num: 8

Candidate Starts for Courthouse_12:

(Start: 8 @5434 has 81 MA's), (40, 5620), (48, 5689), (60, 5737), (63, 5743), (79, 5821), (105, 5929), (109, 5962), (110, 5965), (111, 5971), (124, 6085), (126, 6106), (132, 6163), (133, 6166), (141, 6259), (144, 6283), (149, 6334), (150, 6349), (153, 6364), (174, 6508), (185, 6580), (186, 6589),

Gene: Cracklewink_11 Start: 6524, Stop: 7870, Start Num: 8

Candidate Starts for Cracklewink_11:

(Start: 8 @6524 has 81 MA's), (25, 6623), (33, 6656), (37, 6683), (39, 6689), (44, 6761), (60, 6830), (63, 6836), (75, 6920), (79, 6935), (96, 6989), (99, 7007), (105, 7049), (111, 7091), (114, 7127), (121, 7190), (128, 7238), (140, 7373), (141, 7379), (144, 7403), (152, 7481), (155, 7496), (158, 7511), (183, 7694), (185, 7703), (186, 7712),

Gene: DaftyDuck_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for DaftyDuck_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484),

(153, 3565), (175, 3715),

Gene: Dallas_11 Start: 5370, Stop: 6593, Start Num: 8

Candidate Starts for Dallas_11:

(Start: 8 @5370 has 81 MA's), (33, 5496), (60, 5667), (63, 5673), (79, 5751), (105, 5856), (109, 5889), (110, 5892), (111, 5898), (115, 5940), (118, 5961), (132, 6090), (133, 6093), (141, 6186), (144, 6210), (159, 6321), (179, 6468), (185, 6507), (186, 6516), (189, 6531),

Gene: Danimal_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Danimal_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Danno_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Danno_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: DmpstrDiver_11 Start: 6011, Stop: 7234, Start Num: 8

Candidate Starts for DmpstrDiver_11:

(Start: 8 @6011 has 81 MA's), (33, 6137), (60, 6308), (63, 6314), (79, 6392), (105, 6497), (109, 6530), (110, 6533), (111, 6539), (115, 6581), (118, 6602), (132, 6731), (133, 6734), (141, 6827), (144, 6851), (159, 6962), (179, 7109), (185, 7148), (186, 7157), (189, 7172),

Gene: Dongwon_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Dongwon_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Dooby_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Dooby_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Douggie_4 Start: 2629, Stop: 3783, Start Num: 12

Candidate Starts for Douggie_4:

(Start: 12 @2629 has 1 MA's), (Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 36 @2761 has 2 MA's), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: Dove_9 Start: 5139, Stop: 6362, Start Num: 8

Candidate Starts for Dove_9:

(Start: 8 @5139 has 81 MA's), (33, 5265), (60, 5436), (63, 5442), (79, 5520), (105, 5625), (109, 5658), (110, 5661), (111, 5667), (115, 5709), (118, 5730), (132, 5859), (133, 5862), (141, 5955), (144, 5979), (159, 6090), (179, 6237), (185, 6276), (186, 6285), (189, 6300),

Gene: Duke13_8 Start: 5396, Stop: 6619, Start Num: 8

Candidate Starts for Duke13_8:

(Start: 8 @5396 has 81 MA's), (33, 5522), (60, 5693), (63, 5699), (79, 5777), (105, 5882), (109, 5915), (110, 5918), (111, 5924), (115, 5966), (118, 5987), (132, 6116), (133, 6119), (141, 6212), (144, 6236), (159, 6347), (179, 6494), (185, 6533), (186, 6542), (189, 6557),

Gene: Dylan_31 Start: 14816, Stop: 16045, Start Num: 8

Candidate Starts for Dylan_31:

(Start: 8 @14816 has 81 MA's), (23, 14909), (24, 14912), (31, 14954), (42, 15053), (47, 15086), (52, 15098), (55, 15113), (61, 15140), (64, 15149), (76, 15236), (78, 15245), (117, 15476), (128, 15563), (132, 15614), (136, 15650), (138, 15674), (143, 15722), (145, 15737), (156, 15836), (157, 15839), (166, 15920), (170, 15947), (173, 15962), (174, 15965), (179, 15989), (182, 16019), (188, 16040),

Gene: EdElric_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for EdElric_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Efeke_5 Start: 2520, Stop: 3692, Start Num: 18

Candidate Starts for Efeke_5:

(15, 2508), (Start: 18 @2520 has 109 MA's), (30, 2592), (32, 2598), (40, 2658), (67, 2805), (70, 2814), (83, 2886), (96, 2931), (105, 2979), (119, 3108), (131, 3210), (132, 3213), (139, 3294), (145, 3336), (153, 3417), (174, 3561), (175, 3567),

Gene: Eightball_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Eightball_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Ejimix_13 Start: 6581, Stop: 7804, Start Num: 8

Candidate Starts for Ejimix_13:

(Start: 8 @6581 has 81 MA's), (33, 6707), (60, 6878), (63, 6884), (79, 6962), (105, 7067), (109, 7100), (110, 7103), (111, 7109), (115, 7151), (118, 7172), (132, 7301), (133, 7304), (141, 7397), (144, 7421), (159, 7532), (179, 7679), (185, 7718), (186, 7727), (189, 7742),

Gene: Ekko14_4 Start: 2647, Stop: 3774, Start Num: 18

Candidate Starts for Ekko14_4:

(Start: 18 @2647 has 109 MA's), (30, 2716), (Start: 36 @2752 has 2 MA's), (Start: 38 @2758 has 13 MA's), (40, 2782), (50, 2857), (67, 2929), (68, 2932), (70, 2938), (73, 2971), (82, 3007), (104, 3100), (105, 3103), (112, 3154), (119, 3232), (121, 3244), (127, 3286), (132, 3337), (137, 3388), (139, 3418), (145, 3460), (150, 3526), (153, 3541), (175, 3691),

Gene: Elspeth_4 Start: 2647, Stop: 3774, Start Num: 18

Candidate Starts for Elspeth_4:

(Start: 18 @2647 has 109 MA's), (30, 2716), (Start: 36 @2752 has 2 MA's), (Start: 38 @2758 has 13 MA's), (40, 2782), (50, 2857), (67, 2929), (68, 2932), (70, 2938), (73, 2971), (82, 3007), (104, 3100), (105, 3103), (112, 3154), (119, 3232), (121, 3244), (127, 3286), (132, 3337), (137, 3388), (139, 3418), (145, 3460), (150, 3526), (153, 3541), (175, 3691),

Gene: EricMillard_12 Start: 6116, Stop: 7339, Start Num: 8

Candidate Starts for EricMillard_12:

(Start: 8 @6116 has 81 MA's), (33, 6242), (60, 6413), (63, 6419), (79, 6497), (105, 6602), (109, 6635), (110, 6638), (111, 6644), (115, 6686), (118, 6707), (132, 6836), (133, 6839), (141, 6932), (144, 6956), (159, 7067), (179, 7214), (185, 7253), (186, 7262), (189, 7277),

Gene: Erin_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Erin_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Euratis_3 Start: 2222, Stop: 3574, Start Num: 8

Candidate Starts for Euratis_3:

(6, 2192), (Start: 8 @2222 has 81 MA's), (22, 2300), (34, 2366), (37, 2387), (44, 2462), (56, 2510), (74, 2615), (82, 2645), (91, 2669), (98, 2699), (102, 2726), (106, 2768), (107, 2771), (119, 2882), (121, 2894), (125, 2915), (136, 3032), (143, 3104), (151, 3185), (163, 3284), (167, 3320), (176, 3371), (181, 3410), (184, 3428), (187, 3449),

Gene: Familton_33 Start: 15095, Stop: 16324, Start Num: 8

Candidate Starts for Familton_33:

(Start: 8 @15095 has 81 MA's), (23, 15188), (24, 15191), (31, 15233), (42, 15332), (47, 15365), (52, 15377), (55, 15392), (61, 15419), (64, 15428), (76, 15515), (78, 15524), (117, 15755), (128, 15842), (132, 15893), (136, 15929), (138, 15953), (143, 16001), (145, 16016), (156, 16115), (157, 16118), (166, 16199), (170, 16226), (173, 16241), (174, 16244), (179, 16268), (182, 16298), (188, 16319),

Gene: Firecracker_32 Start: 14714, Stop: 15943, Start Num: 8

Candidate Starts for Firecracker_32:

(Start: 8 @14714 has 81 MA's), (23, 14807), (24, 14810), (31, 14852), (42, 14951), (47, 14984), (52, 14996), (55, 15011), (61, 15038), (64, 15047), (76, 15134), (78, 15143), (117, 15374), (128, 15461), (132, 15512), (136, 15548), (138, 15572), (143, 15620), (145, 15635), (156, 15734), (157, 15737), (166, 15818), (170, 15845), (173, 15860), (174, 15863), (179, 15887), (182, 15917), (188, 15938),

Gene: FoulBall_32 Start: 15089, Stop: 16318, Start Num: 8

Candidate Starts for FoulBall_32:

(Start: 8 @15089 has 81 MA's), (23, 15182), (24, 15185), (31, 15227), (42, 15326), (47, 15359), (52, 15371), (55, 15386), (61, 15413), (64, 15422), (76, 15509), (78, 15518), (117, 15749), (128, 15836), (132, 15887), (136, 15923), (138, 15947), (143, 15995), (145, 16010), (156, 16109), (157, 16112), (166, 16193), (170, 16220), (173, 16235), (174, 16238), (179, 16262), (182, 16292), (188, 16313),

Gene: Gabbspett_4 Start: 2761, Stop: 3888, Start Num: 18

Candidate Starts for Gabbspett_4:

(Start: 18 @2761 has 109 MA's), (30, 2830), (Start: 38 @2872 has 13 MA's), (40, 2896), (50, 2971), (67, 3043), (68, 3046), (70, 3052), (73, 3085), (82, 3121), (104, 3214), (105, 3217), (112, 3268), (119, 3346), (121, 3358), (127, 3400), (132, 3451), (139, 3532), (145, 3574), (153, 3655), (175, 3805),

Gene: Gardevoir_4 Start: 2660, Stop: 3787, Start Num: 18

Candidate Starts for Gardevoir_4:

(Start: 18 @2660 has 109 MA's), (30, 2729), (Start: 38 @2771 has 13 MA's), (40, 2795), (50, 2870), (67, 2942), (68, 2945), (70, 2951), (73, 2984), (82, 3020), (104, 3113), (105, 3116), (112, 3167), (119, 3245), (121, 3257), (127, 3299), (132, 3350), (139, 3431), (145, 3473), (153, 3554), (175, 3704),

Gene: Gillker_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Gillker_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Godfather_4 Start: 2776, Stop: 3798, Start Num: 36

Candidate Starts for Godfather_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: GoldenBlanche_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for GoldenBlanche_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Gonephishing_12 Start: 5962, Stop: 7191, Start Num: 8

Candidate Starts for Gonephishing_12:

(Start: 8 @5962 has 81 MA's), (25, 6055), (33, 6088), (60, 6259), (62, 6262), (63, 6265), (79, 6343), (105, 6454), (108, 6475), (110, 6490), (111, 6496), (124, 6610), (126, 6631), (132, 6688), (133, 6691), (141, 6784), (144, 6808), (150, 6874), (165, 6985), (169, 7012), (183, 7096), (185, 7105), (189, 7129),

Gene: Goobery_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Goobery_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Halley_12 Start: 5831, Stop: 7054, Start Num: 8

Candidate Starts for Halley_12:

(Start: 8 @5831 has 81 MA's), (33, 5957), (60, 6128), (63, 6134), (79, 6212), (105, 6317), (109, 6350), (110, 6353), (111, 6359), (115, 6401), (118, 6422), (132, 6551), (133, 6554), (141, 6647), (144, 6671), (159, 6782), (179, 6929), (185, 6968), (186, 6977), (189, 6992),

Gene: Hannaconda_9 Start: 4114, Stop: 5349, Start Num: 8

Candidate Starts for Hannaconda_9:

(Start: 8 @4114 has 81 MA's), (40, 4300), (48, 4369), (60, 4417), (63, 4423), (79, 4501), (105, 4609), (109, 4642), (110, 4645), (111, 4651), (124, 4765), (126, 4786), (132, 4843), (133, 4846), (141, 4939), (144, 4963), (149, 5014), (150, 5029), (153, 5044), (174, 5188), (185, 5260), (186, 5269),

Gene: HarperAnne_4 Start: 2758, Stop: 3774, Start Num: 38

Candidate Starts for HarperAnne_4:

(Start: 18 @2647 has 109 MA's), (30, 2716), (Start: 36 @2752 has 2 MA's), (Start: 38 @2758 has 13 MA's), (40, 2782), (50, 2857), (67, 2929), (68, 2932), (70, 2938), (73, 2971), (82, 3007), (104, 3100), (105, 3103), (112, 3154), (119, 3232), (121, 3244), (127, 3286), (132, 3337), (137, 3388), (139, 3418), (145, 3460), (150, 3526), (153, 3541), (175, 3691),

Gene: Heather_3 Start: 2179, Stop: 3543, Start Num: 8

Candidate Starts for Heather_3:

(2, 2119), (3, 2122), (Start: 8 @2179 has 81 MA's), (22, 2272), (29, 2311), (34, 2335), (43, 2428), (56, 2479), (65, 2521), (74, 2584), (80, 2605), (82, 2614), (84, 2620), (98, 2662), (102, 2689), (106, 2731), (107, 2734), (121, 2857), (123, 2866), (125, 2878), (126, 2893), (129, 2935), (136, 2995), (138, 3019),

(151, 3148), (161, 3235), (167, 3283), (168, 3289), (171, 3304), (176, 3334), (185, 3397), (187, 3412),

Gene: Hernandez44_4 Start: 2872, Stop: 3888, Start Num: 38

Candidate Starts for Hernandez44_4:

(Start: 18 @2761 has 109 MA's), (30, 2830), (Start: 38 @2872 has 13 MA's), (40, 2896), (50, 2971), (67, 3043), (68, 3046), (70, 3052), (73, 3085), (82, 3121), (104, 3214), (105, 3217), (112, 3268), (119, 3346), (121, 3358), (127, 3400), (132, 3451), (139, 3532), (145, 3574), (153, 3655), (175, 3805),

Gene: Hilltopfarm_11 Start: 6514, Stop: 7845, Start Num: 8

Candidate Starts for Hilltopfarm_11:

(Start: 8 @6514 has 81 MA's), (9, 6520), (10, 6523), (19, 6571), (28, 6628), (33, 6649), (37, 6676), (46, 6769), (60, 6820), (62, 6823), (63, 6826), (79, 6925), (84, 6943), (89, 6952), (92, 6958), (96, 6979), (105, 7039), (111, 7081), (121, 7180), (126, 7216), (127, 7225), (128, 7228), (132, 7273), (133, 7276), (141, 7369), (144, 7393), (154, 7483), (158, 7501), (159, 7504), (173, 7615), (179, 7651), (183, 7684), (185, 7693), (190, 7729),

Gene: HokkenD_7 Start: 5399, Stop: 6622, Start Num: 8

Candidate Starts for HokkenD_7:

(Start: 8 @5399 has 81 MA's), (33, 5525), (60, 5696), (63, 5702), (79, 5780), (105, 5885), (109, 5918), (110, 5921), (111, 5927), (115, 5969), (118, 5990), (132, 6119), (133, 6122), (141, 6215), (144, 6239), (159, 6350), (179, 6497), (185, 6536), (186, 6545), (189, 6560),

Gene: Horacetta_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Horacetta_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Hughesyang_11 Start: 6011, Stop: 7234, Start Num: 8

Candidate Starts for Hughesyang_11:

(Start: 8 @6011 has 81 MA's), (33, 6137), (60, 6308), (63, 6314), (79, 6392), (105, 6497), (109, 6530), (110, 6533), (111, 6539), (115, 6581), (118, 6602), (132, 6731), (133, 6734), (141, 6827), (144, 6851), (159, 6962), (179, 7109), (185, 7148), (186, 7157), (189, 7172),

Gene: Hulk_4 Start: 2782, Stop: 3798, Start Num: 38

Candidate Starts for Hulk_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (131, 3358), (132, 3361), (137, 3412), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Idergollasper_32 Start: 15089, Stop: 16318, Start Num: 8

Candidate Starts for Idergollasper_32:

(Start: 8 @15089 has 81 MA's), (23, 15182), (24, 15185), (31, 15227), (42, 15326), (47, 15359), (52, 15371), (55, 15386), (61, 15413), (64, 15422), (76, 15509), (78, 15518), (117, 15749), (128, 15836), (132, 15887), (136, 15923), (138, 15947), (143, 15995), (145, 16010), (156, 16109), (157, 16112), (166, 16193), (170, 16220), (173, 16235), (174, 16238), (179, 16262), (182, 16292), (188, 16313),

Gene: JRok_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for JRok_4:

(14, 2641), (Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (96, 3064), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (131, 3343), (132, 3346), (137, 3397), (139,

3427), (145, 3469), (148, 3511), (153, 3550), (175, 3700),

Gene: Jahseh_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Jahseh_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: JaimeB_4 Start: 2782, Stop: 3798, Start Num: 38

Candidate Starts for JaimeB_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: JangDynasty_32 Start: 15184, Stop: 16413, Start Num: 8

Candidate Starts for JangDynasty_32:

(Start: 8 @15184 has 81 MA's), (23, 15277), (24, 15280), (31, 15322), (42, 15421), (47, 15454), (52, 15466), (55, 15481), (61, 15508), (64, 15517), (76, 15604), (78, 15613), (117, 15844), (128, 15931), (132, 15982), (136, 16018), (138, 16042), (143, 16090), (145, 16105), (156, 16204), (157, 16207), (166, 16288), (170, 16315), (173, 16330), (174, 16333), (179, 16357), (182, 16387), (188, 16408),

Gene: Jannah_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Jannah_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Jerky_4 Start: 2740, Stop: 3867, Start Num: 18

Candidate Starts for Jerky_4:

(14, 2725), (Start: 18 @2740 has 109 MA's), (30, 2809), (Start: 38 @2851 has 13 MA's), (40, 2875), (50, 2950), (67, 3022), (68, 3025), (70, 3031), (73, 3064), (104, 3193), (105, 3196), (112, 3247), (119, 3325), (121, 3337), (127, 3379), (132, 3430), (137, 3481), (139, 3511), (145, 3553), (153, 3634), (175, 3784),

Gene: JoBros_4 Start: 2660, Stop: 3787, Start Num: 18

Candidate Starts for JoBros_4:

(Start: 18 @2660 has 109 MA's), (30, 2729), (Start: 38 @2771 has 13 MA's), (40, 2795), (50, 2870), (67, 2942), (68, 2945), (70, 2951), (73, 2984), (82, 3020), (104, 3113), (105, 3116), (112, 3167), (119, 3245), (121, 3257), (127, 3299), (132, 3350), (139, 3431), (145, 3473), (153, 3554), (175, 3704),

Gene: JooneeDee_4 Start: 2689, Stop: 3816, Start Num: 18

Candidate Starts for JooneeDee_4:

(Start: 18 @2689 has 109 MA's), (30, 2758), (Start: 36 @2794 has 2 MA's), (Start: 38 @2800 has 13 MA's), (40, 2824), (50, 2899), (67, 2971), (68, 2974), (70, 2980), (73, 3013), (82, 3049), (104, 3142), (105, 3145), (112, 3196), (119, 3274), (121, 3286), (127, 3328), (132, 3379), (139, 3460), (145, 3502), (150, 3568), (153, 3583), (175, 3733),

Gene: Josuke_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Josuke_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: JuicyJay_13 Start: 6661, Stop: 7884, Start Num: 8

Candidate Starts for JuicyJay_13:

(Start: 8 @6661 has 81 MA's), (33, 6787), (60, 6958), (63, 6964), (79, 7042), (105, 7147), (109, 7180), (110, 7183), (111, 7189), (115, 7231), (118, 7252), (132, 7381), (133, 7384), (141, 7477), (144, 7501), (159, 7612), (179, 7759), (185, 7798), (186, 7807), (189, 7822),

Gene: Kaijohn_4 Start: 2665, Stop: 3792, Start Num: 18

Candidate Starts for Kaijohn_4:

(14, 2650), (Start: 18 @2665 has 109 MA's), (30, 2734), (Start: 36 @2770 has 2 MA's), (Start: 38 @2776 has 13 MA's), (40, 2800), (50, 2875), (67, 2947), (68, 2950), (70, 2956), (73, 2989), (82, 3025), (104, 3118), (105, 3121), (112, 3172), (119, 3250), (121, 3262), (127, 3304), (131, 3352), (132, 3355), (137, 3406), (139, 3436), (145, 3478), (153, 3559), (175, 3709),

Gene: Kalah2_12 Start: 6430, Stop: 7653, Start Num: 8

Candidate Starts for Kalah2_12:

(Start: 8 @6430 has 81 MA's), (33, 6556), (60, 6727), (63, 6733), (79, 6811), (105, 6916), (109, 6949), (110, 6952), (111, 6958), (115, 7000), (118, 7021), (132, 7150), (133, 7153), (141, 7246), (144, 7270), (159, 7381), (179, 7528), (185, 7567), (186, 7576), (189, 7591),

Gene: KashFlow_6 Start: 3680, Stop: 4915, Start Num: 8

Candidate Starts for KashFlow_6:

(Start: 8 @3680 has 81 MA's), (40, 3866), (48, 3935), (60, 3983), (63, 3989), (79, 4067), (105, 4175), (109, 4208), (110, 4211), (111, 4217), (124, 4331), (126, 4352), (132, 4409), (133, 4412), (141, 4505), (144, 4529), (149, 4580), (150, 4595), (153, 4610), (174, 4754), (185, 4826), (186, 4835),

Gene: KayPaulus_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for KayPaulus_4:

(Start: 12 @2629 has 1 MA's), (Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 36 @2761 has 2 MA's), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (96, 3064), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: Kevanna_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for Kevanna_4:

(Start: 12 @2629 has 1 MA's), (Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 36 @2761 has 2 MA's), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: KillerTomato_4 Start: 2710, Stop: 3837, Start Num: 18

Candidate Starts for KillerTomato_4:

(Start: 12 @2683 has 1 MA's), (Start: 18 @2710 has 109 MA's), (30, 2779), (Start: 36 @2815 has 2 MA's), (Start: 38 @2821 has 13 MA's), (40, 2845), (50, 2920), (67, 2992), (68, 2995), (70, 3001), (73, 3034), (82, 3070), (96, 3118), (104, 3163), (105, 3166), (112, 3217), (119, 3295), (121, 3307), (127, 3349), (131, 3397), (132, 3400), (137, 3451), (139, 3481), (145, 3523), (153, 3604), (175, 3754),

Gene: Klein_12 Start: 5407, Stop: 6630, Start Num: 8

Candidate Starts for Klein_12:

(Start: 8 @5407 has 81 MA's), (33, 5533), (60, 5704), (63, 5710), (79, 5788), (105, 5893), (109, 5926), (110, 5929), (111, 5935), (115, 5977), (118, 5998), (132, 6127), (133, 6130), (141, 6223), (144, 6247), (159, 6358), (179, 6505), (185, 6544), (186, 6553), (189, 6568),

Gene: Kojax4_4 Start: 2776, Stop: 3798, Start Num: 36

Candidate Starts for Kojax4_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Krili_31 Start: 14817, Stop: 16046, Start Num: 8

Candidate Starts for Krili_31:

(Start: 8 @14817 has 81 MA's), (23, 14910), (24, 14913), (31, 14955), (42, 15054), (47, 15087), (49, 15090), (52, 15099), (55, 15114), (61, 15141), (64, 15150), (76, 15237), (78, 15246), (117, 15477), (128, 15564), (132, 15615), (136, 15651), (138, 15675), (143, 15723), (156, 15837), (157, 15840), (166, 15921), (170, 15948), (173, 15963), (174, 15966), (179, 15990), (182, 16020), (188, 16041),

Gene: KyriosFaba_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for KyriosFaba_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: LaviMo_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for LaviMo_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Leafy_4 Start: 2677, Stop: 3804, Start Num: 18

Candidate Starts for Leafy_4:

(Start: 12 @2650 has 1 MA's), (Start: 18 @2677 has 109 MA's), (30, 2746), (Start: 36 @2782 has 2 MA's), (Start: 38 @2788 has 13 MA's), (40, 2812), (50, 2887), (67, 2959), (68, 2962), (70, 2968), (73, 3001), (82, 3037), (104, 3130), (105, 3133), (112, 3184), (119, 3262), (121, 3274), (127, 3316), (131, 3364), (132, 3367), (137, 3418), (139, 3448), (145, 3490), (153, 3571), (175, 3721),

Gene: LemonPepper_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for LemonPepper_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Lilbooboo_3 Start: 2201, Stop: 3571, Start Num: 8

Candidate Starts for Lilbooboo_3:

(5, 2165), (Start: 8 @2201 has 81 MA's), (34, 2354), (56, 2498), (73, 2591), (74, 2603), (82, 2633), (84, 2639), (85, 2642), (102, 2708), (106, 2750), (107, 2753), (119, 2864), (121, 2876), (122, 2879), (123, 2885), (125, 2897), (126, 2912), (136, 3014), (143, 3086), (151, 3167), (161, 3254), (167, 3302), (176, 3353), (179, 3371), (181, 3392), (184, 3410),

Gene: LionelHutz_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for LionelHutz_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: LittleE_11 Start: 5813, Stop: 7042, Start Num: 8

Candidate Starts for LittleE_11:

(Start: 8 @5813 has 81 MA's), (25, 5906), (33, 5939), (60, 6110), (62, 6113), (63, 6116), (79, 6194), (105, 6305), (108, 6326), (110, 6341), (111, 6347), (124, 6461), (126, 6482), (132, 6539), (133, 6542), (141, 6635), (144, 6659), (150, 6725), (165, 6836), (169, 6863), (183, 6947), (185, 6956), (189, 6980),

Gene: Livingwater_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for Livingwater_4:

(Start: 12 @2629 has 1 MA's), (Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 36 @2761 has 2 MA's), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (96, 3064), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: Loca_4 Start: 2677, Stop: 3804, Start Num: 18

Candidate Starts for Loca_4:

(Start: 12 @2650 has 1 MA's), (Start: 18 @2677 has 109 MA's), (30, 2746), (Start: 36 @2782 has 2 MA's), (Start: 38 @2788 has 13 MA's), (40, 2812), (50, 2887), (67, 2959), (68, 2962), (70, 2968), (73, 3001), (82, 3037), (104, 3130), (105, 3133), (112, 3184), (119, 3262), (127, 3316), (131, 3364), (132, 3367), (137, 3418), (139, 3448), (145, 3490), (148, 3532), (153, 3571), (175, 3721),

Gene: Lola20_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for Lola20_4:

(Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: Lucky2013_12 Start: 5184, Stop: 6413, Start Num: 8

Candidate Starts for Lucky2013_12:

(Start: 8 @5184 has 81 MA's), (25, 5277), (33, 5310), (60, 5481), (62, 5484), (63, 5487), (79, 5565), (105, 5676), (108, 5697), (110, 5712), (111, 5718), (124, 5832), (126, 5853), (132, 5910), (133, 5913), (141, 6006), (144, 6030), (150, 6096), (165, 6207), (169, 6234), (183, 6318), (185, 6327), (189, 6351),

Gene: Lunatic_4 Start: 2647, Stop: 3774, Start Num: 18

Candidate Starts for Lunatic_4:

(Start: 18 @2647 has 109 MA's), (30, 2716), (Start: 36 @2752 has 2 MA's), (Start: 38 @2758 has 13 MA's), (40, 2782), (50, 2857), (67, 2929), (68, 2932), (70, 2938), (73, 2971), (82, 3007), (104, 3100), (105, 3103), (112, 3154), (119, 3232), (121, 3244), (127, 3286), (132, 3337), (139, 3418), (145, 3460), (150, 3526), (153, 3541), (175, 3691),

Gene: Luxx_4 Start: 2794, Stop: 3810, Start Num: 38

Candidate Starts for Luxx_4:

(Start: 12 @2656 has 1 MA's), (Start: 18 @2683 has 109 MA's), (30, 2752), (Start: 38 @2794 has 13 MA's), (40, 2818), (50, 2893), (67, 2965), (68, 2968), (70, 2974), (73, 3007), (82, 3043), (104, 3136), (105, 3139), (112, 3190), (119, 3268), (121, 3280), (127, 3322), (132, 3373), (139, 3454), (145, 3496), (153, 3577), (175, 3727),

Gene: MadKillah_33 Start: 15027, Stop: 16256, Start Num: 8

Candidate Starts for MadKillah_33:

(Start: 8 @15027 has 81 MA's), (23, 15120), (24, 15123), (31, 15165), (42, 15264), (47, 15297), (52, 15309), (55, 15324), (61, 15351), (64, 15360), (76, 15447), (78, 15456), (117, 15687), (128, 15774), (132, 15825), (136, 15861), (138, 15885), (143, 15933), (145, 15948), (156, 16047), (157, 16050), (166, 16131), (170, 16158), (173, 16173), (174, 16176), (179, 16200), (182, 16230), (188, 16251),

Gene: Majesty_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Majesty_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: ManAs_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for ManAs_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Maneater_4 Start: 2758, Stop: 3774, Start Num: 38

Candidate Starts for Maneater_4:

(Start: 18 @2647 has 109 MA's), (30, 2716), (Start: 38 @2758 has 13 MA's), (40, 2782), (50, 2857), (67, 2929), (68, 2932), (70, 2938), (73, 2971), (82, 3007), (104, 3100), (105, 3103), (112, 3154), (119, 3232), (121, 3244), (127, 3286), (132, 3337), (137, 3388), (139, 3418), (145, 3460), (153, 3541), (175, 3691),

Gene: MasterPitts_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for MasterPitts_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: McShie_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for McShie_4:

(14, 2641), (Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (96, 3064), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (131, 3343), (132, 3346), (139, 3427), (145, 3469), (148, 3511), (153, 3550), (175, 3700),

Gene: MelBee03_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for MelBee03_4:

(Start: 12 @2629 has 1 MA's), (Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 36 @2761 has 2 MA's), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: MiaZeal_12 Start: 5253, Stop: 6488, Start Num: 8

Candidate Starts for MiaZeal_12:

(Start: 8 @5253 has 81 MA's), (40, 5439), (48, 5508), (60, 5556), (63, 5562), (79, 5640), (105, 5748), (109, 5781), (110, 5784), (111, 5790), (124, 5904), (126, 5925), (132, 5982), (133, 5985), (141, 6078), (144, 6102), (149, 6153), (150, 6168), (153, 6183), (174, 6327), (185, 6399), (186, 6408),

Gene: Miaurora_4 Start: 2764, Stop: 3891, Start Num: 18

Candidate Starts for Miaurora_4:

(Start: 18 @2764 has 109 MA's), (30, 2833), (Start: 36 @2869 has 2 MA's), (Start: 38 @2875 has 13 MA's), (40, 2899), (50, 2974), (67, 3046), (68, 3049), (70, 3055), (73, 3088), (82, 3124), (104, 3217), (105, 3220), (112, 3271), (119, 3349), (121, 3361), (127, 3403), (132, 3454), (139, 3535), (145, 3577), (150, 3643), (153, 3658), (175, 3808),

Gene: Minerva_11 Start: 5890, Stop: 7113, Start Num: 8

Candidate Starts for Minerva_11:

(Start: 8 @5890 has 81 MA's), (33, 6016), (60, 6187), (63, 6193), (79, 6271), (105, 6376), (109, 6409), (110, 6412), (111, 6418), (115, 6460), (118, 6481), (132, 6610), (133, 6613), (141, 6706), (144, 6730), (159, 6841), (179, 6988), (185, 7027), (186, 7036), (189, 7051),

Gene: Minima_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Minima_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: MirimarMandM_4 Start: 2689, Stop: 3858, Start Num: 18

Candidate Starts for MirimarMandM_4:

(Start: 18 @2689 has 109 MA's), (30, 2758), (Start: 36 @2794 has 2 MA's), (Start: 38 @2800 has 13 MA's), (40, 2824), (50, 2899), (67, 2971), (68, 2974), (70, 2980), (73, 3013), (82, 3049), (104, 3142), (105, 3145), (112, 3196), (119, 3274), (121, 3286), (127, 3328), (132, 3379), (139, 3460), (145, 3502), (150, 3568), (153, 3583), (174, 3727), (175, 3733),

Gene: MooMoo_3 Start: 1799, Stop: 3073, Start Num: 8

Candidate Starts for MooMoo_3:

(Start: 8 @1799 has 81 MA's), (11, 1817), (21, 1868), (31, 1931), (44, 2042), (45, 2048), (49, 2063), (52, 2072), (53, 2078), (55, 2087), (57, 2105), (64, 2123), (66, 2141), (69, 2150), (72, 2177), (73, 2192), (76, 2210), (78, 2219), (86, 2246), (90, 2258), (93, 2273), (94, 2276), (95, 2282), (97, 2288), (103, 2330), (113, 2417), (116, 2435), (117, 2447), (119, 2474), (120, 2480), (131, 2582), (132, 2585), (136, 2621), (137, 2636), (141, 2681), (146, 2714), (147, 2735), (148, 2750), (156, 2807), (157, 2810), (159, 2819), (160, 2834), (162, 2858), (172, 2930), (178, 2972), (179, 2981), (180, 2990),

Gene: Mori_31 Start: 14688, Stop: 15917, Start Num: 8

Candidate Starts for Mori_31:

(Start: 8 @14688 has 81 MA's), (23, 14781), (24, 14784), (31, 14826), (42, 14925), (47, 14958), (52, 14970), (55, 14985), (61, 15012), (64, 15021), (76, 15108), (78, 15117), (117, 15348), (128, 15435), (132, 15486), (136, 15522), (138, 15546), (143, 15594), (156, 15708), (157, 15711), (166, 15792), (170, 15819), (173, 15834), (174, 15837), (179, 15861), (182, 15891), (188, 15912),

Gene: MrGreen_4 Start: 2677, Stop: 3804, Start Num: 18

Candidate Starts for MrGreen_4:

(Start: 12 @2650 has 1 MA's), (Start: 18 @2677 has 109 MA's), (30, 2746), (Start: 36 @2782 has 2 MA's), (Start: 38 @2788 has 13 MA's), (40, 2812), (50, 2887), (67, 2959), (68, 2962), (70, 2968), (73, 3001), (82, 3037), (104, 3130), (105, 3133), (112, 3184), (119, 3262), (121, 3274), (127, 3316), (131, 3364), (132, 3367), (137, 3418), (139, 3448), (145, 3490), (153, 3571), (175, 3721),

Gene: Murai_32 Start: 14878, Stop: 16107, Start Num: 8

Candidate Starts for Murai_32:

(Start: 8 @14878 has 81 MA's), (23, 14971), (24, 14974), (31, 15016), (42, 15115), (47, 15148), (49, 15151), (52, 15160), (55, 15175), (61, 15202), (64, 15211), (76, 15298), (78, 15307), (117, 15538), (128, 15625), (132, 15676), (136, 15712), (138, 15736), (143, 15784), (156, 15898), (157, 15901), (166, 15982), (170, 16009), (173, 16024), (174, 16027), (179, 16051), (182, 16081), (188, 16102),

Gene: Naby_4 Start: 2373, Stop: 3533, Start Num: 18

Candidate Starts for Naby_4:

(13, 2355), (16, 2364), (Start: 18 @2373 has 109 MA's), (Start: 38 @2484 has 13 MA's), (40, 2508), (51, 2586), (67, 2655), (70, 2664), (73, 2697), (96, 2781), (105, 2829), (119, 2958), (121, 2970), (126,

3003), (130, 3057), (132, 3063), (137, 3114), (145, 3186), (150, 3252), (153, 3267), (174, 3411), (175, 3417),

Gene: Namsahir_4 Start: 2680, Stop: 3846, Start Num: 18

Candidate Starts for Namsahir_4:

(Start: 18 @2680 has 109 MA's), (30, 2749), (Start: 36 @2785 has 2 MA's), (Start: 38 @2791 has 13 MA's), (40, 2815), (50, 2890), (67, 2962), (68, 2965), (70, 2971), (73, 3004), (82, 3040), (104, 3133), (105, 3136), (112, 3187), (119, 3265), (121, 3277), (127, 3319), (132, 3370), (139, 3451), (145, 3493), (150, 3559), (153, 3574), (174, 3718), (175, 3724),

Gene: NeumannU_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for NeumannU_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: NiebruSaylor_31 Start: 14689, Stop: 15918, Start Num: 8

Candidate Starts for NiebruSaylor_31:

(Start: 8 @14689 has 81 MA's), (23, 14782), (24, 14785), (31, 14827), (42, 14926), (47, 14959), (49, 14962), (52, 14971), (55, 14986), (61, 15013), (64, 15022), (76, 15109), (78, 15118), (117, 15349), (128, 15436), (132, 15487), (136, 15523), (138, 15547), (143, 15595), (156, 15709), (157, 15712), (166, 15793), (170, 15820), (173, 15835), (174, 15838), (179, 15862), (182, 15892), (188, 15913),

Gene: Niffler_4 Start: 2737, Stop: 3864, Start Num: 18

Candidate Starts for Niffler_4:

(Start: 18 @2737 has 109 MA's), (30, 2806), (Start: 36 @2842 has 2 MA's), (Start: 38 @2848 has 13 MA's), (40, 2872), (50, 2947), (67, 3019), (68, 3022), (70, 3028), (73, 3061), (82, 3097), (104, 3190), (105, 3193), (112, 3244), (119, 3322), (121, 3334), (127, 3376), (132, 3427), (139, 3508), (145, 3550), (150, 3616), (153, 3631), (175, 3781),

Gene: NihilNomen_11 Start: 5890, Stop: 7113, Start Num: 8

Candidate Starts for NihilNomen_11:

(Start: 8 @5890 has 81 MA's), (33, 6016), (60, 6187), (63, 6193), (79, 6271), (105, 6376), (109, 6409), (110, 6412), (111, 6418), (115, 6460), (118, 6481), (132, 6610), (133, 6613), (141, 6706), (144, 6730), (159, 6841), (179, 6988), (185, 7027), (186, 7036), (189, 7051),

Gene: Nobel_4 Start: 2764, Stop: 3891, Start Num: 18

Candidate Starts for Nobel_4:

(Start: 18 @2764 has 109 MA's), (30, 2833), (Start: 36 @2869 has 2 MA's), (Start: 38 @2875 has 13 MA's), (40, 2899), (50, 2974), (67, 3046), (68, 3049), (70, 3055), (73, 3088), (82, 3124), (104, 3217), (105, 3220), (112, 3271), (119, 3349), (121, 3361), (127, 3403), (132, 3454), (139, 3535), (145, 3577), (150, 3643), (153, 3658), (175, 3808),

Gene: Noelani_4 Start: 2647, Stop: 3774, Start Num: 18

Candidate Starts for Noelani_4:

(Start: 18 @2647 has 109 MA's), (30, 2716), (Start: 36 @2752 has 2 MA's), (Start: 38 @2758 has 13 MA's), (40, 2782), (50, 2857), (67, 2929), (68, 2932), (70, 2938), (73, 2971), (82, 3007), (104, 3100), (105, 3103), (112, 3154), (119, 3232), (121, 3244), (127, 3286), (132, 3337), (137, 3388), (139, 3418), (145, 3460), (150, 3526), (153, 3541), (175, 3691),

Gene: Oaklynn_4 Start: 2770, Stop: 3786, Start Num: 38

Candidate Starts for Oaklynn_4:

(14, 2644), (Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (96, 3067), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (131, 3346), (132, 3349), (137, 3400), (139, 3430), (145, 3472), (148, 3514), (153, 3553), (175, 3703),

Gene: Octopus_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Octopus_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Odette_11 Start: 5369, Stop: 6592, Start Num: 8

Candidate Starts for Odette_11:

(Start: 8 @5369 has 81 MA's), (33, 5495), (60, 5666), (63, 5672), (79, 5750), (105, 5855), (109, 5888), (110, 5891), (111, 5897), (115, 5939), (118, 5960), (132, 6089), (133, 6092), (141, 6185), (144, 6209), (159, 6320), (179, 6467), (185, 6506), (186, 6515), (189, 6530),

Gene: Omega_13 Start: 7158, Stop: 8387, Start Num: 8

Candidate Starts for Omega_13:

(Start: 8 @7158 has 81 MA's), (25, 7251), (33, 7284), (58, 7449), (60, 7455), (63, 7461), (79, 7539), (105, 7650), (110, 7686), (111, 7692), (122, 7794), (132, 7884), (133, 7887), (141, 7980), (144, 8004), (150, 8070), (159, 8115), (164, 8169), (169, 8208), (185, 8301), (186, 8310), (189, 8325),

Gene: Optimus_9 Start: 5396, Stop: 6619, Start Num: 8

Candidate Starts for Optimus_9:

(Start: 8 @5396 has 81 MA's), (33, 5522), (60, 5693), (63, 5699), (79, 5777), (105, 5882), (109, 5915), (110, 5918), (111, 5924), (115, 5966), (118, 5987), (132, 6116), (133, 6119), (141, 6212), (144, 6236), (159, 6347), (179, 6494), (185, 6533), (186, 6542), (189, 6557),

Gene: Otwor_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Otwor_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Owens_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Owens_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: PaoPu_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for PaoPu_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Phoebus_12 Start: 6116, Stop: 7339, Start Num: 8

Candidate Starts for Phoebus_12:

(Start: 8 @6116 has 81 MA's), (33, 6242), (60, 6413), (63, 6419), (79, 6497), (105, 6602), (109, 6635), (110, 6638), (111, 6644), (115, 6686), (118, 6707), (132, 6836), (133, 6839), (141, 6932), (144, 6956), (159, 7067), (179, 7214), (185, 7253), (186, 7262), (189, 7277),

Gene: Picnic_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Picnic_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: PoRanda_4 Start: 2689, Stop: 3858, Start Num: 18

Candidate Starts for PoRanda_4:

(Start: 18 @2689 has 109 MA's), (30, 2758), (Start: 36 @2794 has 2 MA's), (Start: 38 @2800 has 13 MA's), (40, 2824), (50, 2899), (67, 2971), (68, 2974), (70, 2980), (73, 3013), (82, 3049), (104, 3142), (105, 3145), (112, 3196), (119, 3274), (121, 3286), (127, 3328), (132, 3379), (139, 3460), (145, 3502), (150, 3568), (153, 3583), (174, 3727), (175, 3733),

Gene: Pondwater_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Pondwater_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Porcelain_12 Start: 5253, Stop: 6488, Start Num: 8

Candidate Starts for Porcelain_12:

(Start: 8 @5253 has 81 MA's), (40, 5439), (48, 5508), (60, 5556), (63, 5562), (79, 5640), (105, 5748), (109, 5781), (110, 5784), (111, 5790), (124, 5904), (126, 5925), (132, 5982), (133, 5985), (141, 6078), (144, 6102), (149, 6153), (150, 6168), (153, 6183), (174, 6327), (185, 6399), (186, 6408),

Gene: Pound_11 Start: 5886, Stop: 7109, Start Num: 8

Candidate Starts for Pound_11:

(Start: 8 @5886 has 81 MA's), (33, 6012), (60, 6183), (63, 6189), (79, 6267), (105, 6372), (109, 6405), (110, 6408), (111, 6414), (115, 6456), (118, 6477), (132, 6606), (133, 6609), (141, 6702), (144, 6726), (159, 6837), (179, 6984), (185, 7023), (186, 7032), (189, 7047),

Gene: Publix_4 Start: 2680, Stop: 3846, Start Num: 18

Candidate Starts for Publix_4:

(Start: 18 @2680 has 109 MA's), (30, 2749), (Start: 36 @2785 has 2 MA's), (Start: 38 @2791 has 13 MA's), (40, 2815), (50, 2890), (67, 2962), (68, 2965), (70, 2971), (73, 3004), (82, 3040), (104, 3133), (105, 3136), (112, 3187), (119, 3265), (121, 3277), (127, 3319), (132, 3370), (139, 3451), (145, 3493), (150, 3559), (153, 3574), (174, 3718), (175, 3724),

Gene: Puddles3_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Puddles3_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: PuffyCat_4 Start: 2689, Stop: 3816, Start Num: 18

Candidate Starts for PuffyCat_4:

(Start: 18 @2689 has 109 MA's), (30, 2758), (Start: 36 @2794 has 2 MA's), (Start: 38 @2800 has 13 MA's), (40, 2824), (50, 2899), (67, 2971), (68, 2974), (70, 2980), (73, 3013), (82, 3049), (104, 3142), (105, 3145), (112, 3196), (119, 3274), (121, 3286), (127, 3328), (132, 3379), (139, 3460), (145, 3502), (150, 3568), (153, 3583), (175, 3733),

Gene: Quaker_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for Quaker_4:

(Start: 12 @2629 has 1 MA's), (Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 36 @2761 has 2 MA's), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (96, 3064), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: Redno2_11 Start: 5601, Stop: 6824, Start Num: 8

Candidate Starts for Redno2_11:

(Start: 8 @5601 has 81 MA's), (33, 5727), (60, 5898), (63, 5904), (79, 5982), (105, 6087), (109, 6120), (110, 6123), (111, 6129), (115, 6171), (118, 6192), (132, 6321), (133, 6324), (141, 6417), (144, 6441), (159, 6552), (179, 6699), (185, 6738), (186, 6747), (189, 6762),

Gene: RemusLoopin_3 Start: 2182, Stop: 3525, Start Num: 8

Candidate Starts for RemusLoopin_3:

(4, 2137), (Start: 8 @2182 has 81 MA's), (22, 2260), (29, 2296), (34, 2320), (56, 2464), (73, 2557), (74, 2569), (82, 2599), (84, 2605), (85, 2608), (93, 2629), (106, 2716), (107, 2719), (121, 2842), (125, 2863), (126, 2878), (136, 2980), (138, 3004), (151, 3133), (167, 3268), (171, 3289), (176, 3319), (179, 3337), (181, 3358), (184, 3376), (185, 3382),

Gene: Rhogar_4 Start: 2782, Stop: 3798, Start Num: 38

Candidate Starts for Rhogar_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Rhysand_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Rhysand_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: RoscoWindex_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for RoscoWindex_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Ryadel_35 Start: 15905, Stop: 17134, Start Num: 8

Candidate Starts for Ryadel_35:

(Start: 8 @15905 has 81 MA's), (23, 15998), (24, 16001), (26, 16025), (31, 16043), (42, 16142), (47, 16175), (52, 16187), (55, 16202), (61, 16229), (64, 16238), (76, 16325), (78, 16334), (117, 16565), (128, 16652), (132, 16703), (136, 16739), (138, 16763), (143, 16811), (145, 16826), (156, 16925), (157, 16928), (166, 17009), (170, 17036), (173, 17051), (174, 17054), (179, 17078), (182, 17108), (188, 17129),

Gene: Sage7_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Sage7_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Samora_3 Start: 2204, Stop: 3595, Start Num: 8

Candidate Starts for Samora_3:

(5, 2168), (Start: 8 @2204 has 81 MA's), (34, 2357), (35, 2366), (56, 2501), (74, 2606), (82, 2636), (84, 2642), (85, 2645), (102, 2711), (106, 2753), (107, 2756), (119, 2867), (121, 2879), (125, 2900), (126, 2915), (136, 3017), (151, 3170), (161, 3257), (167, 3305), (176, 3356), (179, 3374), (181, 3395), (184, 3413),

Gene: SantasSleigh_4 Start: 2695, Stop: 3822, Start Num: 18

Candidate Starts for SantasSleigh_4:

(Start: 18 @2695 has 109 MA's), (30, 2764), (Start: 36 @2800 has 2 MA's), (Start: 38 @2806 has 13 MA's), (40, 2830), (50, 2905), (67, 2977), (68, 2980), (70, 2986), (73, 3019), (82, 3055), (104, 3148), (105, 3151), (112, 3202), (119, 3280), (121, 3292), (127, 3334), (132, 3385), (139, 3466), (145, 3508), (153, 3589), (175, 3739),

Gene: Sara_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for Sara_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Scamander_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Scamander_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Schatzie_10 Start: 5140, Stop: 6363, Start Num: 8

Candidate Starts for Schatzie_10:

(Start: 8 @5140 has 81 MA's), (33, 5266), (60, 5437), (63, 5443), (79, 5521), (105, 5626), (109, 5659), (110, 5662), (111, 5668), (115, 5710), (118, 5731), (132, 5860), (133, 5863), (141, 5956), (144, 5980), (159, 6091), (179, 6238), (185, 6277), (186, 6286), (189, 6301),

Gene: SchoolBus_32 Start: 15092, Stop: 16321, Start Num: 8

Candidate Starts for SchoolBus_32:

(Start: 8 @15092 has 81 MA's), (23, 15185), (24, 15188), (31, 15230), (42, 15329), (47, 15362), (52, 15374), (55, 15389), (61, 15416), (64, 15425), (76, 15512), (78, 15521), (117, 15752), (128, 15839), (132, 15890), (136, 15926), (138, 15950), (143, 15998), (145, 16013), (156, 16112), (157, 16115), (166, 16196), (170, 16223), (173, 16238), (174, 16241), (179, 16265), (182, 16295), (188, 16316),

Gene: Schuy_33 Start: 15036, Stop: 16265, Start Num: 8

Candidate Starts for Schuy_33:

(Start: 8 @15036 has 81 MA's), (23, 15129), (24, 15132), (31, 15174), (42, 15273), (47, 15306), (49, 15309), (52, 15318), (55, 15333), (61, 15360), (64, 15369), (76, 15456), (78, 15465), (117, 15696), (128, 15783), (132, 15834), (136, 15870), (138, 15894), (143, 15942), (156, 16056), (157, 16059), (166, 16140), (170, 16167), (173, 16182), (174, 16185), (179, 16209), (182, 16239), (188, 16260),

Gene: Scrunchy_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Scrunchy_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: SeaWolves_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for SeaWolves_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Sebastisaurus_3 Start: 2190, Stop: 3551, Start Num: 8

Candidate Starts for Sebastisaurus_3:

(Start: 8 @2190 has 81 MA's), (20, 2265), (22, 2283), (29, 2319), (34, 2343), (56, 2487), (73, 2580), (74, 2592), (80, 2613), (82, 2622), (84, 2628), (85, 2631), (106, 2739), (107, 2742), (123, 2874), (125, 2886), (126, 2901), (135, 2997), (136, 3003), (138, 3027), (151, 3156), (161, 3243), (167, 3291), (168, 3297), (171, 3312), (181, 3381), (185, 3405),

Gene: Shawty_3 Start: 2202, Stop: 3572, Start Num: 8

Candidate Starts for Shawty_3:

(Start: 8 @2202 has 81 MA's), (15, 2241), (29, 2337), (34, 2361), (35, 2370), (37, 2382), (56, 2505), (63, 2535), (71, 2574), (82, 2640), (84, 2646), (85, 2649), (93, 2670), (102, 2715), (106, 2757), (107, 2760), (112, 2793), (119, 2871), (121, 2883), (122, 2886), (125, 2904), (135, 3015), (136, 3021), (143, 3093), (151, 3174), (161, 3261), (167, 3309), (176, 3360), (179, 3378), (185, 3423),

Gene: Shida_32 Start: 14943, Stop: 16172, Start Num: 8

Candidate Starts for Shida_32:

(Start: 8 @14943 has 81 MA's), (23, 15036), (24, 15039), (31, 15081), (42, 15180), (47, 15213), (49, 15216), (52, 15225), (55, 15240), (61, 15267), (64, 15276), (76, 15363), (78, 15372), (117, 15603), (128, 15690), (132, 15741), (136, 15777), (138, 15801), (143, 15849), (156, 15963), (157, 15966), (166, 16047), (170, 16074), (173, 16089), (174, 16092), (179, 16116), (182, 16146), (188, 16167),

Gene: Sippinontea_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for Sippinontea_4:

(Start: 12 @2629 has 1 MA's), (Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 36 @2761 has 2 MA's), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (96, 3064), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: Slentz_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Slentz_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Slizam_4 Start: 2698, Stop: 3825, Start Num: 18

Candidate Starts for Slizam_4:

(Start: 18 @2698 has 109 MA's), (30, 2767), (Start: 36 @2803 has 2 MA's), (Start: 38 @2809 has 13 MA's), (40, 2833), (50, 2908), (67, 2980), (68, 2983), (70, 2989), (73, 3022), (82, 3058), (104, 3151), (105, 3154), (112, 3205), (119, 3283), (121, 3295), (127, 3337), (132, 3388), (139, 3469), (145, 3511), (150, 3577), (153, 3592), (175, 3742),

Gene: Smooch_34 Start: 16232, Stop: 17461, Start Num: 8

Candidate Starts for Smooch_34:

(Start: 8 @16232 has 81 MA's), (23, 16325), (24, 16328), (31, 16370), (42, 16469), (47, 16502), (52, 16514), (55, 16529), (61, 16556), (64, 16565), (76, 16652), (78, 16661), (117, 16892), (128, 16979), (132, 17030), (136, 17066), (138, 17090), (143, 17138), (156, 17252), (157, 17255), (166, 17336),

(170, 17363), (173, 17378), (174, 17381), (179, 17405), (182, 17435), (188, 17456),

Gene: Snuffles_5 Start: 2868, Stop: 3995, Start Num: 18

Candidate Starts for Snuffles_5:

(Start: 12 @2841 has 1 MA's), (Start: 18 @2868 has 109 MA's), (30, 2937), (Start: 36 @2973 has 2 MA's), (Start: 38 @2979 has 13 MA's), (40, 3003), (50, 3078), (67, 3150), (68, 3153), (70, 3159), (73, 3192), (82, 3228), (104, 3321), (105, 3324), (112, 3375), (119, 3453), (121, 3465), (127, 3507), (132, 3558), (139, 3639), (145, 3681), (150, 3747), (153, 3762), (175, 3912),

Gene: Squint_12 Start: 5184, Stop: 6413, Start Num: 8

Candidate Starts for Squint_12:

(Start: 8 @5184 has 81 MA's), (25, 5277), (33, 5310), (60, 5481), (62, 5484), (63, 5487), (79, 5565), (105, 5676), (108, 5697), (110, 5712), (111, 5718), (124, 5832), (126, 5853), (132, 5910), (133, 5913), (141, 6006), (144, 6030), (150, 6096), (165, 6207), (169, 6234), (183, 6318), (185, 6327), (189, 6351),

Gene: Stem_4 Start: 2698, Stop: 3825, Start Num: 18

Candidate Starts for Stem_4:

(Start: 18 @2698 has 109 MA's), (30, 2767), (Start: 36 @2803 has 2 MA's), (Start: 38 @2809 has 13 MA's), (40, 2833), (50, 2908), (67, 2980), (68, 2983), (70, 2989), (73, 3022), (82, 3058), (104, 3151), (105, 3154), (112, 3205), (119, 3283), (121, 3295), (127, 3337), (132, 3388), (139, 3469), (145, 3511), (150, 3577), (153, 3592), (175, 3742),

Gene: Superphikiman_12 Start: 5434, Stop: 6669, Start Num: 8

Candidate Starts for Superphikiman_12:

(Start: 8 @5434 has 81 MA's), (40, 5620), (48, 5689), (60, 5737), (63, 5743), (79, 5821), (105, 5929), (109, 5962), (110, 5965), (111, 5971), (124, 6085), (126, 6106), (132, 6163), (133, 6166), (141, 6259), (144, 6283), (149, 6334), (150, 6349), (153, 6364), (174, 6508), (185, 6580), (186, 6589),

Gene: TG1_3 Start: 2208, Stop: 3587, Start Num: 8

Candidate Starts for TG1_3:

(Start: 8 @2208 has 81 MA's), (34, 2364), (56, 2508), (63, 2538), (81, 2637), (82, 2643), (83, 2646), (93, 2679), (101, 2721), (104, 2748), (106, 2766), (107, 2769), (119, 2880), (121, 2892), (123, 2901), (125, 2913), (136, 3030), (151, 3183), (161, 3270), (176, 3369), (179, 3387), (181, 3408), (185, 3432),

Gene: TeddyBoy_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for TeddyBoy_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: TelAviv_29 Start: 15086, Stop: 16315, Start Num: 8

Candidate Starts for TelAviv_29:

(Start: 8 @15086 has 81 MA's), (23, 15179), (24, 15182), (31, 15224), (42, 15323), (47, 15356), (52, 15368), (55, 15383), (61, 15410), (64, 15419), (76, 15506), (78, 15515), (117, 15746), (128, 15833), (132, 15884), (136, 15920), (138, 15944), (143, 15992), (145, 16007), (156, 16106), (157, 16109), (166, 16190), (170, 16217), (173, 16232), (174, 16235), (179, 16259), (182, 16289), (188, 16310),

Gene: Thibault_8 Start: 5396, Stop: 6619, Start Num: 8

Candidate Starts for Thibault_8:

(Start: 8 @5396 has 81 MA's), (33, 5522), (60, 5693), (63, 5699), (79, 5777), (105, 5882), (109, 5915), (110, 5918), (111, 5924), (115, 5966), (118, 5987), (132, 6116), (133, 6119), (141, 6212), (144, 6236), (159, 6347), (179, 6494), (185, 6533), (186, 6542), (189, 6557),

Gene: ThreeRngTarjay_11 Start: 5886, Stop: 7109, Start Num: 8

Candidate Starts for ThreeRngTarjay_11:

(Start: 8 @5886 has 81 MA's), (33, 6012), (60, 6183), (63, 6189), (79, 6267), (105, 6372), (109, 6405), (110, 6408), (111, 6414), (115, 6456), (118, 6477), (132, 6606), (133, 6609), (141, 6702), (144, 6726), (159, 6837), (179, 6984), (185, 7023), (186, 7032), (189, 7047),

Gene: TimoTea_4 Start: 2647, Stop: 3774, Start Num: 18

Candidate Starts for TimoTea_4:

(Start: 18 @2647 has 109 MA's), (30, 2716), (Start: 38 @2758 has 13 MA's), (40, 2782), (50, 2857), (67, 2929), (68, 2932), (70, 2938), (73, 2971), (82, 3007), (104, 3100), (105, 3103), (112, 3154), (119, 3232), (121, 3244), (127, 3286), (132, 3337), (137, 3388), (139, 3418), (145, 3460), (153, 3541), (175, 3691),

Gene: TinyTruffula_4 Start: 2764, Stop: 3891, Start Num: 18

Candidate Starts for TinyTruffula_4:

(Start: 18 @2764 has 109 MA's), (30, 2833), (Start: 36 @2869 has 2 MA's), (Start: 38 @2875 has 13 MA's), (40, 2899), (50, 2974), (67, 3046), (68, 3049), (70, 3055), (73, 3088), (82, 3124), (104, 3217), (105, 3220), (112, 3271), (119, 3349), (121, 3361), (127, 3403), (132, 3454), (139, 3535), (145, 3577), (150, 3643), (153, 3658), (175, 3808),

Gene: TomBrady12_4 Start: 2698, Stop: 3825, Start Num: 18

Candidate Starts for TomBrady12_4:

(Start: 18 @2698 has 109 MA's), (30, 2767), (Start: 36 @2803 has 2 MA's), (Start: 38 @2809 has 13 MA's), (40, 2833), (50, 2908), (67, 2980), (68, 2983), (70, 2989), (73, 3022), (82, 3058), (104, 3151), (105, 3154), (112, 3205), (119, 3283), (121, 3295), (127, 3337), (132, 3388), (139, 3469), (145, 3511), (150, 3577), (153, 3592), (175, 3742),

Gene: Trireme_4 Start: 2764, Stop: 3891, Start Num: 18

Candidate Starts for Trireme_4:

(Start: 18 @2764 has 109 MA's), (30, 2833), (Start: 36 @2869 has 2 MA's), (Start: 38 @2875 has 13 MA's), (40, 2899), (50, 2974), (67, 3046), (68, 3049), (70, 3055), (73, 3088), (82, 3124), (104, 3217), (105, 3220), (112, 3271), (119, 3349), (121, 3361), (127, 3403), (132, 3454), (139, 3535), (145, 3577), (150, 3643), (153, 3658), (175, 3808),

Gene: Typha_11 Start: 6484, Stop: 7815, Start Num: 8

Candidate Starts for Typha_11:

(Start: 8 @6484 has 81 MA's), (9, 6490), (10, 6493), (19, 6541), (28, 6598), (33, 6619), (37, 6646), (46, 6739), (60, 6790), (62, 6793), (63, 6796), (79, 6895), (84, 6913), (89, 6922), (92, 6928), (96, 6949), (105, 7009), (111, 7051), (121, 7150), (126, 7186), (127, 7195), (128, 7198), (132, 7243), (133, 7246), (141, 7339), (144, 7363), (154, 7453), (158, 7471), (159, 7474), (173, 7585), (179, 7621), (183, 7654), (185, 7663), (190, 7699),

Gene: Upsilon_4 Start: 2689, Stop: 3858, Start Num: 18

Candidate Starts for Upsilon_4:

(Start: 18 @2689 has 109 MA's), (30, 2758), (Start: 36 @2794 has 2 MA's), (Start: 38 @2800 has 13 MA's), (40, 2824), (50, 2899), (67, 2971), (68, 2974), (70, 2980), (73, 3013), (82, 3049), (104, 3142), (105, 3145), (112, 3196), (119, 3274), (121, 3286), (127, 3328), (132, 3379), (139, 3460), (145, 3502), (150, 3568), (153, 3583), (174, 3727), (175, 3733),

Gene: Vagabond_30 Start: 14919, Stop: 16148, Start Num: 8

Candidate Starts for Vagabond_30:

(Start: 8 @14919 has 81 MA's), (23, 15012), (24, 15015), (31, 15057), (42, 15156), (47, 15189), (52, 15201), (55, 15216), (61, 15243), (64, 15252), (76, 15339), (78, 15348), (117, 15579), (128, 15666),

(132, 15717), (136, 15753), (138, 15777), (143, 15825), (145, 15840), (156, 15939), (157, 15942), (166, 16023), (170, 16050), (173, 16065), (174, 16068), (179, 16092), (182, 16122), (188, 16143),

Gene: Vanisius_4 Start: 2671, Stop: 3798, Start Num: 18

Candidate Starts for Vanisius_4:

(Start: 18 @2671 has 109 MA's), (30, 2740), (Start: 36 @2776 has 2 MA's), (Start: 38 @2782 has 13 MA's), (40, 2806), (50, 2881), (67, 2953), (68, 2956), (70, 2962), (73, 2995), (82, 3031), (104, 3124), (105, 3127), (112, 3178), (119, 3256), (121, 3268), (127, 3310), (132, 3361), (139, 3442), (145, 3484), (153, 3565), (175, 3715),

Gene: Vash_3 Start: 2206, Stop: 3567, Start Num: 8

Candidate Starts for Vash_3:

(1, 2071), (5, 2170), (7, 2179), (Start: 8 @2206 has 81 MA's), (34, 2350), (37, 2371), (56, 2494), (74, 2599), (82, 2629), (84, 2635), (102, 2704), (106, 2746), (107, 2749), (119, 2860), (121, 2872), (122, 2875), (125, 2893), (126, 2908), (136, 3010), (139, 3055), (143, 3082), (151, 3163), (161, 3250), (167, 3298), (176, 3349), (179, 3367), (181, 3388), (184, 3406),

Gene: VitulaEligans_4 Start: 2740, Stop: 3867, Start Num: 18

Candidate Starts for VitulaEligans_4:

(14, 2725), (Start: 18 @2740 has 109 MA's), (30, 2809), (Start: 38 @2851 has 13 MA's), (40, 2875), (50, 2950), (67, 3022), (68, 3025), (70, 3031), (73, 3064), (104, 3193), (105, 3196), (112, 3247), (119, 3325), (121, 3337), (127, 3379), (132, 3430), (137, 3481), (139, 3511), (145, 3553), (153, 3634), (175, 3784),

Gene: Vorrps_31 Start: 14689, Stop: 15918, Start Num: 8

Candidate Starts for Vorrps_31:

(Start: 8 @14689 has 81 MA's), (23, 14782), (24, 14785), (31, 14827), (42, 14926), (47, 14959), (52, 14971), (55, 14986), (61, 15013), (64, 15022), (76, 15109), (78, 15118), (117, 15349), (128, 15436), (132, 15487), (136, 15523), (138, 15547), (143, 15595), (156, 15709), (157, 15712), (166, 15793), (170, 15820), (173, 15835), (174, 15838), (179, 15862), (182, 15892), (188, 15913),

Gene: Wanda_12 Start: 5407, Stop: 6630, Start Num: 8

Candidate Starts for Wanda_12:

(Start: 8 @5407 has 81 MA's), (33, 5533), (60, 5704), (63, 5710), (79, 5788), (105, 5893), (109, 5926), (110, 5929), (111, 5935), (115, 5977), (118, 5998), (132, 6127), (133, 6130), (141, 6223), (144, 6247), (159, 6358), (179, 6505), (185, 6544), (186, 6553), (189, 6568),

Gene: Wildflower_32 Start: 14675, Stop: 15904, Start Num: 8

Candidate Starts for Wildflower_32:

(Start: 8 @14675 has 81 MA's), (23, 14768), (24, 14771), (31, 14813), (42, 14912), (47, 14945), (52, 14957), (55, 14972), (61, 14999), (64, 15008), (76, 15095), (78, 15104), (117, 15335), (128, 15422), (132, 15473), (136, 15509), (138, 15533), (143, 15581), (156, 15695), (157, 15698), (161, 15740), (166, 15779), (170, 15806), (173, 15821), (174, 15824), (179, 15848), (182, 15878), (188, 15899),

Gene: Winget_33 Start: 15358, Stop: 16587, Start Num: 8

Candidate Starts for Winget_33:

(Start: 8 @15358 has 81 MA's), (23, 15451), (24, 15454), (31, 15496), (42, 15595), (47, 15628), (52, 15640), (55, 15655), (61, 15682), (64, 15691), (76, 15778), (78, 15787), (117, 16018), (128, 16105), (132, 16156), (136, 16192), (138, 16216), (143, 16264), (145, 16279), (156, 16378), (157, 16381), (166, 16462), (170, 16489), (173, 16504), (174, 16507), (179, 16531), (182, 16561), (188, 16582),

Gene: Witch_4 Start: 2660, Stop: 3787, Start Num: 18

Candidate Starts for Witch_4:

(Start: 18 @2660 has 109 MA's), (30, 2729), (Start: 38 @2771 has 13 MA's), (40, 2795), (50, 2870), (67, 2942), (68, 2945), (70, 2951), (73, 2984), (82, 3020), (104, 3113), (105, 3116), (112, 3167), (119, 3245), (121, 3257), (127, 3299), (132, 3350), (139, 3431), (145, 3473), (153, 3554), (175, 3704),

Gene: Wolfpack_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for Wolfpack_4:

(Start: 12 @2629 has 1 MA's), (Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 36 @2761 has 2 MA's), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (96, 3064), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: Yami_4 Start: 2647, Stop: 3774, Start Num: 18

Candidate Starts for Yami_4:

(Start: 18 @2647 has 109 MA's), (30, 2716), (Start: 36 @2752 has 2 MA's), (Start: 38 @2758 has 13 MA's), (40, 2782), (50, 2857), (67, 2929), (68, 2932), (70, 2938), (73, 2971), (82, 3007), (104, 3100), (105, 3103), (112, 3154), (119, 3232), (121, 3244), (127, 3286), (132, 3337), (139, 3418), (145, 3460), (150, 3526), (153, 3541), (175, 3691),

Gene: Yasuo_4 Start: 2656, Stop: 3783, Start Num: 18

Candidate Starts for Yasuo_4:

(Start: 18 @2656 has 109 MA's), (30, 2725), (Start: 38 @2767 has 13 MA's), (40, 2791), (50, 2866), (67, 2938), (68, 2941), (70, 2947), (73, 2980), (82, 3016), (104, 3109), (105, 3112), (112, 3163), (119, 3241), (121, 3253), (127, 3295), (132, 3346), (139, 3427), (145, 3469), (153, 3550), (175, 3700),

Gene: Yeet_10 Start: 5140, Stop: 6363, Start Num: 8

Candidate Starts for Yeet_10:

(Start: 8 @5140 has 81 MA's), (33, 5266), (60, 5437), (63, 5443), (79, 5521), (105, 5626), (109, 5659), (110, 5662), (111, 5668), (115, 5710), (118, 5731), (132, 5860), (133, 5863), (141, 5956), (144, 5980), (159, 6091), (179, 6238), (185, 6277), (186, 6286), (189, 6301),

Gene: YertPhresh_4 Start: 2659, Stop: 3786, Start Num: 18

Candidate Starts for YertPhresh_4:

(Start: 18 @2659 has 109 MA's), (30, 2728), (Start: 38 @2770 has 13 MA's), (40, 2794), (50, 2869), (67, 2941), (68, 2944), (70, 2950), (73, 2983), (82, 3019), (104, 3112), (105, 3115), (112, 3166), (119, 3244), (121, 3256), (127, 3298), (132, 3349), (139, 3430), (145, 3472), (153, 3553), (175, 3703),

Gene: Yubaba_4 Start: 2660, Stop: 3787, Start Num: 18

Candidate Starts for Yubaba_4:

(Start: 18 @2660 has 109 MA's), (30, 2729), (Start: 38 @2771 has 13 MA's), (40, 2795), (50, 2870), (67, 2942), (68, 2945), (70, 2951), (73, 2984), (82, 3020), (104, 3113), (105, 3116), (112, 3167), (119, 3245), (121, 3257), (127, 3299), (132, 3350), (139, 3431), (145, 3473), (153, 3554), (175, 3704),

Gene: YungJamal_35 Start: 15421, Stop: 16650, Start Num: 8

Candidate Starts for YungJamal_35:

(Start: 8 @15421 has 81 MA's), (23, 15514), (24, 15517), (31, 15559), (42, 15658), (47, 15691), (52, 15703), (55, 15718), (61, 15745), (64, 15754), (76, 15841), (78, 15850), (117, 16081), (128, 16168), (132, 16219), (136, 16255), (138, 16279), (143, 16327), (145, 16342), (156, 16441), (157, 16444), (166, 16525), (170, 16552), (173, 16567), (174, 16570), (179, 16594), (182, 16624), (188, 16645),

Gene: Zakhe101_32 Start: 14820, Stop: 16049, Start Num: 8

Candidate Starts for Zakhe101_32:

(Start: 8 @14820 has 81 MA's), (23, 14913), (24, 14916), (31, 14958), (42, 15057), (47, 15090), (52, 15102), (55, 15117), (61, 15144), (64, 15153), (76, 15240), (78, 15249), (117, 15480), (128, 15567),

(132, 15618), (136, 15654), (138, 15678), (143, 15726), (145, 15741), (156, 15840), (157, 15843),
(166, 15924), (170, 15951), (173, 15966), (174, 15969), (179, 15993), (182, 16023), (188, 16044),

Gene: Zelink_12 Start: 5914, Stop: 7137, Start Num: 8

Candidate Starts for Zelink_12:

(Start: 8 @5914 has 81 MA's), (33, 6040), (60, 6211), (63, 6217), (79, 6295), (105, 6400), (109, 6433),
(110, 6436), (111, 6442), (115, 6484), (118, 6505), (132, 6634), (133, 6637), (141, 6730), (144, 6754),
(159, 6865), (179, 7012), (185, 7051), (186, 7060), (189, 7075),

Gene: phiBT1_34 Start: 2227, Stop: 3600, Start Num: 8

Candidate Starts for phiBT1_34:

(Start: 8 @2227 has 81 MA's), (34, 2380), (56, 2524), (71, 2593), (74, 2629), (82, 2659), (84, 2665),
(93, 2689), (100, 2728), (101, 2731), (106, 2776), (107, 2779), (119, 2890), (121, 2902), (125, 2923),
(126, 2938), (132, 3004), (135, 3034), (136, 3040), (151, 3193), (161, 3280), (167, 3328), (179, 3397),
(181, 3418), (184, 3436), (185, 3442),