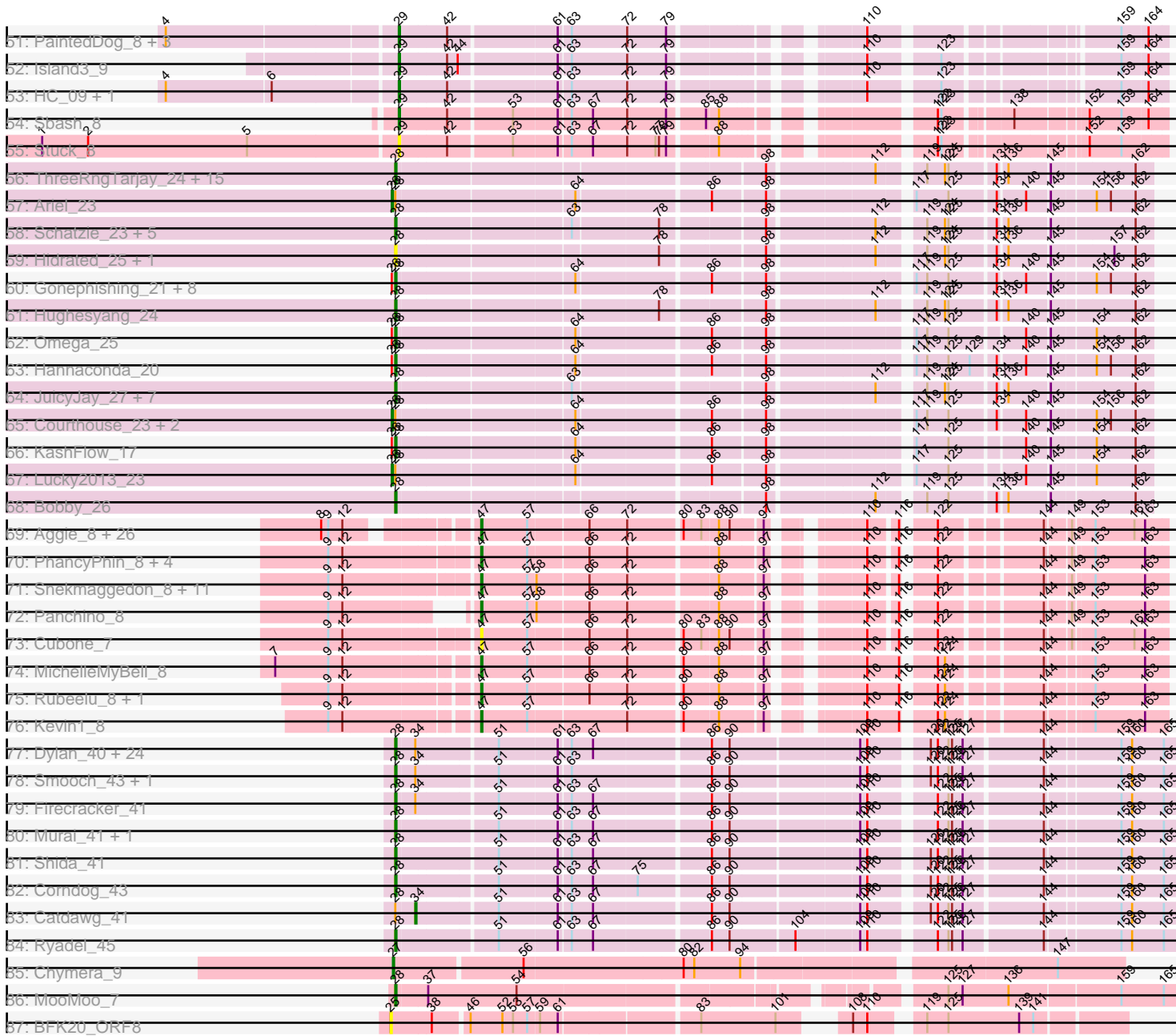


Pham 304634



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 304634 Report

This analysis was run 06/08/26 on database version 649.

Pham number 304634 has 351 members, 46 are drafts.

Phages represented in each track:

- Track 1 : Anatole_8, B3_8, E1_8
- Track 2 : Morrissey_7
- Track 3 : Gustav_7
- Track 4 : Trine_7
- Track 5 : Widow_7
- Track 6 : Mahdia_7
- Track 7 : Upyo_7
- Track 8 : Puppies_7
- Track 9 : Applejacks_7
- Track 10 : TinaLin_15, Banquo_16
- Track 11 : Vendetta_12, Splinter_12
- Track 12 : DinoDaryn_14, Huffy_14, TZGordon_14
- Track 13 : Goib_13
- Track 14 : Gspu1_10
- Track 15 : Dardanus_14
- Track 16 : Schmidt_10
- Track 17 : Catfish_11
- Track 18 : Ghobes_6
- Track 19 : Frizzle_6
- Track 20 : Sapo_6
- Track 21 : Archimedes_6
- Track 22 : Hibiscus_8
- Track 23 : Heinz_8
- Track 24 : DearBasketball_8
- Track 25 : Tarzan_8, DonkeyMan_8
- Track 26 : DinoNuggs_9, Reyja_9
- Track 27 : Santhid_8
- Track 28 : Jojo24_8
- Track 29 : Adnama_16, Elite2014_13, ShereKhan_16, Hopey_15, Filch_15, Easy2Say_15, Hoonter_16, Czyszczonek_15, Stank_16, Greep_15, NonchalantPear_14, Pumpkin_15, Murphy_14, Brewer_14, Phrux_14, Lilac_16, Ptowny_14, BigBubba_14, Terminus_14, AmericanBeauty_16, Bench_16, Cjw1_14, Misfit_14, ChosenOne_13, Highbury_15, Xandras_16, Wiggin_16, DrDrey_15, Elph10_15, Paperbeatsrock_16, Gemini_16, PaddyBaddy_15, Porky_13, Tarkin_16, Gage_16, Petra64142_15, Lilizi_16, OrionPax_15, Pharsalus_15, Maxxinista_15, Stark_15, Moldemort_15, TBrady12_16, Kanye_16, Emmina_14, ChotaBhai_14, Lilpickle_13, Thresher_15, GoldenSpark_16, HanKaySha_15, RiverMonster_14,

244_15, Ukulele_14, Becksu_14, Simpliphy_15, GooberAzure_16, Argent26_16, Nimrod_14, Youngblood_14, MadamMonkfish_14, NoSleep_15, Dumbo_14, JeTaime_16, StolenFromERC_16, Kimchi_16, Saints25_15

- Track 30 : Palpatine_14, Pat3_14, IHOP_14, Qualification_16, Dusk_14, Miniwave_15, Mindy_15, Mosby_14, BugsBunny_12, FairyPath_15, Icee_14, MPhalcon_14, BaboJay_14, Sotrice96_15, NelitzaMV_15, Eureka_15, Liveloughbron_14, Bask21_14, Contagion_14, Barbarian_14, Traaww1_13, Flypotenuse_13, Phaux_13, Amao_15, DoctorDiddles_15, Balomoji_14, Bruin_14, Willez_14, Command613_16, Gator_13, CrystalP_15, Marshmallow_15, Cookies_15, Goku_15, ShamWow_15, Teaspoon_14, Buck_14, Henry_15, ABCat_14, Toto_15, Holt_16, Murica_13, Policronamos_14, Inca_14, StormChicken_15, Daikon_13, xkcd_15, HufflyPuff_13, Nala_14, FireRed_14, StellaBean_15, Tomaszewski_14, Harella_13, Rimmer_14, Kostya_15, TeardropMSU_14, Thimble_15, SirDuracell_14, Sassay_14, Bogg_15, MollyToe_15, Glexan_13, FoghornLeghorn_14, MISSy_14, Rakim_16, Manda_15, Myrale_15, YassJohnny_15, SophKB_15, Cactus_16, Phaja_14, BilboSwaggins_15, Asriel_14, PhatBacter_14, Tuco_15, TeamEdward_15, Goldilocks_16, BadStone_14
- Track 31 : Budgie_16
- Track 32 : Shoya_7
- Track 33 : Gibbzilla_9
- Track 34 : Pigu_8
- Track 35 : BrayBeast_8
- Track 36 : Rooter_8
- Track 37 : Alatao_7
- Track 38 : JeanClaude_8
- Track 39 : Kumotta_9
- Track 40 : Sarge_8
- Track 41 : MargaretKali_9
- Track 42 : Maja_8
- Track 43 : PrairieDogTown_9, Aoka_9, EvenBluerMoon_9, Hereford_10, Morrey_13
- Track 44 : CocoCinnamon_11
- Track 45 : Scotia_10
- Track 46 : NoSwimming_10
- Track 47 : JanetJ_9
- Track 48 : Altostratus_7
- Track 49 : Khuang_7
- Track 50 : Brujita_9
- Track 51 : PaintedDog_8, QueenHazel_9, Xula_8, Babsiella_9
- Track 52 : Island3_9
- Track 53 : HC_09, Bluvara_9
- Track 54 : Sbash_8
- Track 55 : Stuck_8
- Track 56 : ThreeRngTarjay_24, Ejimix_26, Phoebus_25, Beem_25, Bagrid_23, Kalah2_26, Pound_25, EricMillard_25, Optimus_23, Redno2_24, DmpstrDiver_24, Thibault_21, BAKA_22, HokkenD_20, Dallas_25, Halley_25
- Track 57 : Ariel_23
- Track 58 : Schatzie_23, Dove_23, NihilNomen_24, Bombitas_22, Wanda_26, Klein_25
- Track 59 : Hidrated_25, Marleymoo_26
- Track 60 : Gonephishing_21, BronnyJames_17, Squint_22, Nekros_23, Porcelain_23, Rearden_20, Superphikiman_23, Nibley_18, Shaboozey_17
- Track 61 : Hughesyang_24
- Track 62 : Omega_25

- Track 63 : Hannaconda_20
- Track 64 : JuicyJay_27, Minerva_25, Constella_20, Zelink_26, Yeet_23, Odette_24, Xiaokay_22, Duke13_22
- Track 65 : Courthouse_23, LittleE_23, MiaZeal_23
- Track 66 : KashFlow_17
- Track 67 : Lucky2013_23
- Track 68 : Bobby_26
- Track 69 : Aggie_8, Carcharodon_8, Bosection6_8, Journey_8, Parmesanjohn_8, Andies_8, Duplicity_8, Scitech_8, Silvafighter_8, Silvy_8, Phloss_8, Tapioca_8, Melville_8, Xeno_8, Schnauzer_8, Pipsqueaks_8, Chewbacca_8, Philonius_8, Fulbright_8, Tortoise12_8, EGUnicorn_8, Tessdabest_7, Magsby_8, Charlie_8, Xerxes_8, Smurph_8, Gex_8
- Track 70 : PhancyPhin_8, Raymond7_8, Shweta_8, Impisi_8, Phrann_8
- Track 71 : Snekmaggon_8, Redi_8, ShrimpFriedEgg_8, Rebel_8, Spinach_8, BabeRuth_8, Purgamenstris_8, Jamie19_8, Hanako_8, SkinnyPete_8, SpongeBob_8, Nенаe_8
- Track 72 : Panchino_8
- Track 73 : Cubone_7
- Track 74 : MichelleMyBell_8
- Track 75 : Rubeelu_8, Butters_8
- Track 76 : Kevin1_8
- Track 77 : Dylan_40, Alkhayr_41, TelAviv_38, Zakhe101_41, FoulBall_41, Ashwin_42, Familton_42, Bora_38, Winget_42, Blessica_42, SchoolBus_41, NiebruSaylor_40, Mori_40, Schuy_42, Zebo_41, YoyoKar_39, YungJamal_44, Wildflower_41, JangDynasty_41, Wogge42_40, Vorrps_40, KingPhillip3_40, Vagabond_41, MadKillah_42, Idergollasper_41
- Track 78 : Smooch_43, Imara_39
- Track 79 : Firecracker_41
- Track 80 : Murai_41, Krili_40
- Track 81 : Shida_41
- Track 82 : Corndog_43
- Track 83 : Catdawg_41
- Track 84 : Ryadel_45
- Track 85 : Chymera_9
- Track 86 : MooMoo_7
- Track 87 : BFK20_ORF8

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

The start number called the most often in the published annotations is 33, it was called in 132 of the 305 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_15, ABCat_14, Adnama_16, Amao_15, AmericanBeauty_16, Argent26_16, Asriel_14, BaboJay_14, BadStone_14, Balomoji_14, Barbarian_14, Bask21_14, Becksu_14, Bench_16, BigBubba_14, BilboSwaggins_15, Bogg_15, Brewer_14, Bruin_14, Buck_14, Budgie_16, BugsBunny_12, Cactus_16, ChosenOne_13, ChotaBhai_14, Cjw1_14, Command613_16, Contagion_14, Cookies_15, CrystalP_15, Czyszczon1_15, Daikon_13, DoctorDiddles_15, DrDrey_15, Dumbo_14, Dusk_14, Easy2Say_15, Elite2014_13, Elph10_15, Emmina_14, Eureka_15,

FairyPath_15, Filch_15, FireRed_14, Flypotenuse_13, FoghornLeghorn_14, Gage_16, Gator_13, Gemini_16, Glexan_13, Goku_15, GoldenSpark_16, Goldilocks_16, GooberAzure_16, Greep_15, HanKaySha_15, Harella_13, Henry_15, Highbury_15, Holt_16, Hoonter_16, Hopey_15, HufflyPuff_13, IHOP_14, Icee_14, Inca_14, JeTaime_16, Kanye_16, Kimchi_16, Kostya_15, Lilac_16, Lilizi_16, Lilpickle_13, Livelaughbron_14, MISSy_14, MPhalcon_14, MadamMonkfish_14, Manda_15, Marshmallow_15, Maxxinista_15, Mindy_15, Miniwave_15, Misfit_14, Moldemort_15, MollyToe_15, Mosby_14, Murica_13, Murphy_14, Myrale_15, Nala_14, NelitzaMV_15, Nimrod_14, NoSleep_15, NonchalantPear_14, OrionPax_15, PaddyBaddy_15, Palpatine_14, Paperbeatsrock_16, Pat3_14, Petra64142_15, Phaja_14, Pharsalus_15, PhatBacter_14, Phaux_13, Phrux_14, Policronamos_14, Porky_13, Ptowny_14, Pumpkin_15, Quallification_16, Rakim_16, Rimmer_14, RiverMonster_14, Saints25_15, Sassay_14, ShamWow_15, ShereKhan_16, Simpliphy_15, SirDuracell_14, SophKB_15, Sotrice96_15, Stank_16, Stark_15, StellaBean_15, StolenFromERC_16, StormChicken_15, TBrady12_16, Tarkin_16, TeamEdward_15, TeardropMSU_14, Teaspoon_14, Terminus_14, Thimble_15, Thresher_15, Tomaszewski_14, Toto_15, Traaww1_13, Tuco_15, Ukulele_14, Wiggin_16, Willez_14, Xandras_16, YassJohnny_15, Youngblood_14, xkcd_15,

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

- Dardanus_14,

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

- Aggie_8, Alatato_7, Alkhayr_41, Altostratus_7, Anatole_8, Andies_8, Aoka_9, Applejacks_7, Archimedes_6, Ariel_23, Ashwin_42, B3_8, BAKA_22, BFK20_ORF8, BabeRuth_8, Babsiella_9, Bagrid_23, Banquo_16, Beem_25, Blessica_42, Bluvara_9, Bobby_26, Bombitas_22, Bora_38, Bosection6_8, BrayBeast_8, BronnyJames_17, Brujita_9, Butters_8, Carcharodon_8, Catdawg_41, Catfish_11, Charlie_8, Chewbacca_8, Chymera_9, CocoCinnamon_11, Constella_20, Corndog_43, Courthouse_23, Cubone_7, Dallas_25, DearBasketball_8, DinoDaryn_14, DinoNuggs_9, DmpstrDiver_24, DonkeyMan_8, Dove_23, Duke13_22, Duplicity_8, Dylan_40, E1_8, EGUnicorn_8, Ejimix_26, EricMillard_25, EvenBluerMoon_9, Familton_42, Firecracker_41, FoulBall_41, Frizzle_6, Fulbright_8, Gex_8, Ghobes_6, Gibbzilla_9, Goib_13, Gonephishing_21, Gspu1_10, Gustav_7, HC_09, Halley_25, Hanako_8, Hannaconda_20, Heinz_8, Hereford_10, Hibiscus_8, Hidrated_25, HokkenD_20, Huffy_14, Hughesyang_24, Idergollasper_41, Imara_39, Impisi_8, Island3_9, Jamie19_8, JanetJ_9, JangDynasty_41, JeanClaude_8, Jojo24_8, Journey_8, JuicyJay_27, Kalah2_26, KashFlow_17, Kevin1_8, Khuang_7, KingPhillip3_40, Klein_25, Krili_40, Kumotta_9, LittleE_23, Lucky2013_23, MadKillah_42, Magsby_8, Mahdia_7, Maja_8, MargaretKali_9, Marleymoo_26, Melville_8, MiaZeal_23, MichelleMyBell_8, Minerva_25, MooMoo_7, Mori_40, Morrey_13, Morrissey_7, Murai_41, Nekros_23, Nenae_8, Nibley_18, NiebruSaylor_40, NihilNomen_24, NoSwimming_10, Odette_24, Omega_25, Optimus_23, PaintedDog_8, Panchino_8, Parmesanjohn_8, PhancyPhin_8, Philonius_8, Phloss_8, Phoebus_25, Phrann_8, Pigu_8, Pipsqueaks_8, Porcelain_23, Pound_25, PrairieDogTown_9, Puppies_7, Purgamenstris_8, QueenHazel_9, Raymond7_8, Rearden_20, Rebel_8, Redi_8, Redno2_24, Reyja_9, Rooter_8, Rubeelu_8, Ryadel_45, Santhid_8, Sapo_6, Sarge_8, Sbash_8, Schatzie_23, Schmidt_10, Schnauzer_8, SchoolBus_41, Schuy_42, Scitech_8, Scotia_10, Shaboozey_17, Shida_41, Shoya_7, ShrimpFriedEgg_8, Shweta_8, Silvafighter_8, Silvy_8, SkinnyPete_8, Smooch_43, Smurph_8, Snekmaggon_8, Spinach_8, Splinter_12, SpongeBob_8, Squint_22, Stuck_8, Superphikiman_23,

TZGordon_14, Tapioca_8, Tarzan_8, TelAviv_38, Tessdabest_7, Thibault_21, ThreeRngTarjay_24, TinaLin_15, Tortoise12_8, Trine_7, Upyo_7, Vagabond_41, Vendetta_12, Vorrrps_40, Wanda_26, Widow_7, Wildflower_41, Winget_42, Wogge42_40, Xeno_8, Xerxes_8, Xiaokay_22, Xula_8, Yeet_23, YoyoKar_39, YungJamal_44, Zakhe101_41, Zebo_41, Zelink_26,

Summary by start number:

Start 14:

- Found in 1 of 351 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gibbzilla_9 (FB),

Start 17:

- Found in 1 of 351 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gsput1_10 (CU2),

Start 18:

- Found in 1 of 351 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trine_7 (CD),

Start 19:

- Found in 9 of 351 (2.6%) of genes in pham
- Manual Annotations of this start: 2 of 305
- Called 55.6% of time when present
- Phage (with cluster) where this start called: JeanClaude_8 (FB), Pigu_8 (FB), Rooter_8 (FB), Sarge_8 (FB), Shoya_7 (FB),

Start 20:

- Found in 1 of 351 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Applejacks_7 (CD),

Start 21:

- Found in 15 of 351 (4.3%) of genes in pham
- Manual Annotations of this start: 9 of 305
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Alatato_7 (FB), Aoka_9 (FO), BrayBeast_8 (FB), CocoCinnamon_11 (FO), EvenBluerMoon_9 (FO), Hereford_10 (FO), JanetJ_9 (FO), Maja_8 (FO), Morrey_13 (FO), PrairieDogTown_9 (FO),

Start 22:

- Found in 4 of 351 (1.1%) of genes in pham
- Manual Annotations of this start: 4 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archimedes_6 (DA), Frizzle_6 (DA), Ghobes_6 (DA), Sapo_6 (DA),

Start 23:

- Found in 1 of 351 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Morrissey_7 (CD),

Start 24:

- Found in 9 of 351 (2.6%) of genes in pham
- Manual Annotations of this start: 8 of 305
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Anatole_8 (BV), B3_8 (BV), E1_8 (BV), Gustav_7 (CD), Mahdia_7 (CD), Puppies_7 (CD), Upyo_7 (CD), Widow_7 (CD),

Start 25:

- Found in 3 of 351 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BFK20_ORF8 (singleton), NoSwimming_10 (FO), Scotia_10 (FO),

Start 26:

- Found in 19 of 351 (5.4%) of genes in pham
- Manual Annotations of this start: 6 of 305
- Called 31.6% of time when present
- Phage (with cluster) where this start called: Ariel_23 (J), Courthouse_23 (J), LittleE_23 (J), Lucky2013_23 (J), MiaZeal_23 (J), Schmidt_10 (CU4),

Start 27:

- Found in 1 of 351 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chymera_9 (singleton),

Start 28:

- Found in 86 of 351 (24.5%) of genes in pham
- Manual Annotations of this start: 65 of 305
- Called 93.0% of time when present
- Phage (with cluster) where this start called: Alkhayr_41 (O), Ashwin_42 (O), BAKA_22 (J), Bagrid_23 (J), Beem_25 (J), Blessica_42 (O), Bobby_26 (J), Bombitas_22 (J), Bora_38 (O), BronnyJames_17 (J), Constella_20 (J), Corndog_43 (O), Dallas_25 (J), DmpstrDiver_24 (J), Dove_23 (J), Duke13_22 (J), Dylan_40 (O), Ejimix_26 (J), EricMillard_25 (J), Familton_42 (O), Firecracker_41 (O), FoulBall_41 (O), Gonephishing_21 (J), Halley_25 (J), Hannaconda_20 (J), Hidrated_25 (J), HokkenD_20 (J), Hughesyang_24 (J), Idergollasper_41 (O), Imara_39 (O), JangDynasty_41 (O), JuicyJay_27 (J), Kalah2_26 (J), KashFlow_17 (J), KingPhillip3_40 (O), Klein_25 (J), Krili_40 (O), MadKillah_42 (O), Marleymoo_26 (J), Minerva_25 (J), MooMoo_7 (singleton), Mori_40 (O), Murai_41 (O), Nekros_23 (J), Nibley_18 (J), NiebruSaylor_40 (O), NihilNomen_24 (J), Odette_24 (J), Omega_25 (J), Optimus_23 (J), Phoebus_25 (J), Porcelain_23 (J), Pound_25 (J), Rearden_20 (J), Redno2_24 (J), Ryadel_45 (O), Schatzie_23 (J), SchoolBus_41 (O), Schuy_42 (O), Shaboozey_17 (J), Shida_41 (O), Smooch_43 (O), Squint_22 (J), Superphikiman_23 (J), TelAviv_38 (O), Thibault_21 (J), ThreeRngTarjay_24 (J),

Vagabond_41 (O), Vorrps_40 (O), Wanda_26 (J), Wildflower_41 (O), Winget_42 (O), Wogge42_40 (O), Xiaokay_22 (J), Yeet_23 (J), YoyoKar_39 (O), YungJamal_44 (O), Zakhe101_41 (O), Zebo_41 (O), Zelink_26 (J),

Start 29:

- Found in 21 of 351 (6.0%) of genes in pham
- Manual Annotations of this start: 14 of 305
- Called 81.0% of time when present
- Phage (with cluster) where this start called: Babsiella_9 (I1), Banquo_16 (CU1), Bluvara_9 (I3), Catfish_11 (CU5), Dardanus_14 (CU3), DinoDaryn_14 (CU1), Goib_13 (CU1), HC_09 (I1), Huffy_14 (CU1), Island3_9 (I1), PaintedDog_8 (I1), QueenHazel_9 (I1), Sbash_8 (I2), Stuck_8 (I2), TZGordon_14 (CU1), TinaLin_15 (CU1), Xula_8 (I1),

Start 31:

- Found in 9 of 351 (2.6%) of genes in pham
- Manual Annotations of this start: 7 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DearBasketball_8 (DY), DinoNuggs_9 (DY), DonkeyMan_8 (DY), Heinz_8 (DY), Hibiscus_8 (DY), Jojo24_8 (DY), Reyja_9 (DY), Santhid_8 (DY), Tarzan_8 (DY),

Start 32:

- Found in 5 of 351 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 305
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Altostratus_7 (FS), Khuang_7 (FS),

Start 33:

- Found in 146 of 351 (41.6%) of genes in pham
- Manual Annotations of this start: 132 of 305
- Called 99.3% of time when present
- Phage (with cluster) where this start called: 244_15 (E), ABCat_14 (E), Adnama_16 (E), Amao_15 (E), AmericanBeauty_16 (E), Argent26_16 (E), Asriel_14 (E), BaboJay_14 (E), BadStone_14 (E), Balomoji_14 (E), Barbarian_14 (E), Bask21_14 (E), Becksu_14 (E), Bench_16 (E), BigBubba_14 (E), BilboSwaggins_15 (E), Bogg_15 (E), Brewer_14 (E), Bruin_14 (E), Buck_14 (E), Budgie_16 (E), BugsBunny_12 (E), Cactus_16 (E), ChosenOne_13 (E), ChotaBhai_14 (E), Cjw1_14 (E), Command613_16 (E), Contagion_14 (E), Cookies_15 (E), CrystalP_15 (E), Czyszczonek_15 (E), Daikon_13 (E), DoctorDiddles_15 (E), DrDrey_15 (E), Dumbo_14 (E), Dusk_14 (E), Easy2Say_15 (E), Elite2014_13 (E), Elph10_15 (E), Emmina_14 (E), Eureka_15 (E), FairyPath_15 (E), Filch_15 (E), FireRed_14 (E), Flypotenuse_13 (E), FoghornLeghorn_14 (E), Gage_16 (E), Gator_13 (E), Gemini_16 (E), Glexan_13 (E), Goku_15 (E), GoldenSpark_16 (E), Goldilocks_16 (E), GooberAzure_16 (E), Greep_15 (E), HanKaySha_15 (E), Harella_13 (E), Henry_15 (E), Highbury_15 (E), Holt_16 (E), Hoonter_16 (E), Hopey_15 (E), HuffyPuff_13 (E), IHOP_14 (E), Icee_14 (E), Inca_14 (E), JeTaime_16 (E), Kanye_16 (E), Kimchi_16 (E), Kostya_15 (E), Lilac_16 (E), Lilizi_16 (E), Lilpickle_13 (E), Livelaughbron_14 (E), MISSy_14 (E), MPhalcon_14 (E), MadamMonkfish_14 (E), Manda_15 (E), Marshmallow_15 (E), Maxxinista_15 (E), Mindy_15 (E), Miniwave_15 (E), Misfit_14 (E), Moldemort_15 (E), MollyToe_15 (E), Mosby_14 (E), Murica_13 (E), Murphy_14 (E), Myrale_15 (E), Nala_14 (E), NelitzaMV_15 (E), Nimrod_14 (E), NoSleep_15 (E), NonchalantPear_14 (E), OrionPax_15 (E), PaddyBaddy_15 (E), Palpatine_14 (E),

Paperbeatsrock_16 (E), Pat3_14 (E), Petra64142_15 (E), Phaja_14 (E), Pharsalus_15 (E), PhatBacter_14 (E), Phaux_13 (E), Phrux_14 (E), Policronamos_14 (E), Porky_13 (E), Ptowny_14 (E), Pumpkin_15 (E), Quallification_16 (E), Rakim_16 (E), Rimmer_14 (E), RiverMonster_14 (E), Saints25_15 (E), Sassay_14 (E), ShamWow_15 (E), ShereKhan_16 (E), Simpliphy_15 (E), SirDuracell_14 (E), SophKB_15 (E), Sotrice96_15 (E), Stank_16 (E), Stark_15 (E), StellaBean_15 (E), StolenFromERC_16 (E), StormChicken_15 (E), TBrady12_16 (E), Tarkin_16 (E), TeamEdward_15 (E), TeardropMSU_14 (E), Teaspoon_14 (E), Terminus_14 (E), Thimble_15 (E), Thresher_15 (E), Tomaszewski_14 (E), Toto_15 (E), Traaww1_13 (E), Tuco_15 (E), Ukulele_14 (E), Wiggin_16 (E), Willez_14 (E), Xandras_16 (E), YassJohnny_15 (E), Youngblood_14 (E), xkcd_15 (E),

Start 34:

- Found in 30 of 351 (8.5%) of genes in pham
- Manual Annotations of this start: 2 of 305
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Catdawg_41 (O), Kumotta_9 (FB),

Start 35:

- Found in 11 of 351 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 305
- Called 9.1% of time when present
- Phage (with cluster) where this start called: MargaretKali_9 (FB),

Start 42:

- Found in 10 of 351 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 305
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Brujita_9 (I1),

Start 45:

- Found in 10 of 351 (2.8%) of genes in pham
- Manual Annotations of this start: 2 of 305
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Splinter_12 (CU1), Vendetta_12 (CU1),

Start 47:

- Found in 50 of 351 (14.2%) of genes in pham
- Manual Annotations of this start: 46 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aggie_8 (N), Andies_8 (N), BabeRuth_8 (N), Bosection6_8 (N), Butters_8 (N), Carcharodon_8 (N), Charlie_8 (N), Chewbacca_8 (N), Cubone_7 (N), Duplicity_8 (N), EGUnicorn_8 (N), Fulbright_8 (N), Gex_8 (N), Hanako_8 (N), Impisi_8 (N), Jamie19_8 (N), Journey_8 (N), Kevin1_8 (N), Magsby_8 (N), Melville_8 (N), MichelleMyBell_8 (N), Nenae_8 (N), Panchino_8 (N), Parmesanjohn_8 (N), PhancyPhin_8 (N), Philonius_8 (N), Phloss_8 (N), Phrann_8 (N), Pipsqueaks_8 (N), Purgamenstris_8 (N), Raymond7_8 (N), Rebel_8 (N), Redi_8 (N), Rubeelu_8 (N), Schnauzer_8 (N), Scitech_8 (N), ShrimpFriedEgg_8 (N), Shweta_8 (N), Silvafighter_8 (N), Silvy_8 (N), SkinnyPete_8 (N), Smurph_8 (N), Snekmaggedon_8 (N), Spinach_8 (N), SpongeBob_8 (N), Tapioca_8 (N), Tessdabest_7 (N), Tortoise12_8 (N), Xeno_8 (N), Xerxes_8 (N),

Summary by clusters:

There are 20 clusters represented in this pham: CU5, FS, E, CU2, CU1, DA, I1, BV, J, I3, singleton, O, N, FB, CU4, DY, CU3, CD, I2, FO,

Info for manual annotations of cluster BV:

- Start number 24 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster CD:

- Start number 18 was manually annotated 1 time for cluster CD.
- Start number 23 was manually annotated 1 time for cluster CD.
- Start number 24 was manually annotated 5 times for cluster CD.

Info for manual annotations of cluster CU1:

- Start number 29 was manually annotated 6 times for cluster CU1.
- Start number 45 was manually annotated 2 times for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 29 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

- Start number 26 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

- Start number 29 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster DA:

- Start number 22 was manually annotated 4 times for cluster DA.

Info for manual annotations of cluster DY:

- Start number 31 was manually annotated 7 times for cluster DY.

Info for manual annotations of cluster E:

- Start number 33 was manually annotated 132 times for cluster E.

Info for manual annotations of cluster FB:

- Start number 19 was manually annotated 2 times for cluster FB.
- Start number 21 was manually annotated 2 times for cluster FB.
- Start number 34 was manually annotated 1 time for cluster FB.
- Start number 35 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FO:

- Start number 21 was manually annotated 7 times for cluster FO.
- Start number 25 was manually annotated 2 times for cluster FO.

Info for manual annotations of cluster FS:

- Start number 32 was manually annotated 1 time for cluster FS.

Info for manual annotations of cluster I1:

- Start number 29 was manually annotated 5 times for cluster I1.
- Start number 42 was manually annotated 1 time for cluster I1.

Info for manual annotations of cluster I2:

- Start number 29 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster J:

- Start number 26 was manually annotated 5 times for cluster J.
- Start number 28 was manually annotated 35 times for cluster J.

Info for manual annotations of cluster N:

- Start number 47 was manually annotated 46 times for cluster N.

Info for manual annotations of cluster O:

- Start number 28 was manually annotated 29 times for cluster O.
- Start number 34 was manually annotated 1 time for cluster O.

Gene Information:

Gene: 244_15 Start: 8901, Stop: 9467, Start Num: 33

Candidate Starts for 244_15:

(Start: 33 @8901 has 132 MA's), (67, 9039), (83, 9129), (86, 9138), (109, 9258), (114, 9285), (132, 9351),

Gene: ABCat_14 Start: 9678, Stop: 10244, Start Num: 33

Candidate Starts for ABCat_14:

(Start: 33 @9678 has 132 MA's), (67, 9816), (83, 9906), (86, 9915), (109, 10035), (114, 10062), (132, 10128),

Gene: Adnama_16 Start: 9133, Stop: 9699, Start Num: 33

Candidate Starts for Adnama_16:

(Start: 33 @9133 has 132 MA's), (67, 9271), (83, 9361), (86, 9370), (109, 9490), (114, 9517), (132, 9583),

Gene: Aggie_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Aggie_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Alatato_7 Start: 6037, Stop: 6552, Start Num: 21

Candidate Starts for Alatato_7:

(Start: 19 @6034 has 2 MA's), (Start: 21 @6037 has 9 MA's), (Start: 35 @6067 has 1 MA's), (43, 6094), (51, 6130), (67, 6202), (74, 6232), (89, 6292), (95, 6310), (107, 6352), (108, 6355), (109, 6361), (121, 6400),

Gene: Alkhayr_41 Start: 21489, Stop: 22094, Start Num: 28

Candidate Starts for Alkhayr_41:

(Start: 28 @21489 has 65 MA's), (Start: 34 @21504 has 2 MA's), (51, 21567), (61, 21615), (63, 21624), (67, 21642), (86, 21732), (90, 21747), (109, 21849), (110, 21855), (120, 21897), (122, 21903), (125, 21912), (126, 21915), (127, 21924), (144, 21987), (159, 22044), (160, 22053), (165, 22080),

Gene: Altostratus_7 Start: 5860, Stop: 6384, Start Num: 32

Candidate Starts for Altostratus_7:

(Start: 32 @5860 has 1 MA's), (79, 6052), (118, 6202), (125, 6223), (132, 6256), (139, 6280),

Gene: Amao_15 Start: 8883, Stop: 9449, Start Num: 33

Candidate Starts for Amao_15:

(Start: 33 @8883 has 132 MA's), (67, 9021), (83, 9111), (86, 9120), (109, 9240), (114, 9267), (132, 9333),

Gene: AmericanBeauty_16 Start: 9130, Stop: 9696, Start Num: 33

Candidate Starts for AmericanBeauty_16:

(Start: 33 @9130 has 132 MA's), (67, 9268), (83, 9358), (86, 9367), (109, 9487), (114, 9514), (132, 9580),

Gene: Anatole_8 Start: 6423, Stop: 6980, Start Num: 24

Candidate Starts for Anatole_8:

(Start: 24 @6423 has 8 MA's), (Start: 32 @6438 has 1 MA's), (52, 6495), (56, 6513), (57, 6516), (81, 6639), (92, 6672), (99, 6696), (100, 6699), (105, 6714), (109, 6750), (116, 6783), (118, 6792), (131, 6843), (140, 6876), (142, 6885), (148, 6906), (160, 6960),

Gene: Andies_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Andies_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Aoka_9 Start: 7589, Stop: 8104, Start Num: 21

Candidate Starts for Aoka_9:

(Start: 21 @7589 has 9 MA's),

Gene: Applejacks_7 Start: 5984, Stop: 6535, Start Num: 20

Candidate Starts for Applejacks_7:

(20, 5984), (54, 6086), (57, 6095), (61, 6119), (65, 6131), (72, 6170), (77, 6194), (80, 6212), (108, 6317), (109, 6323), (113, 6347), (127, 6395), (129, 6401), (155, 6515),

Gene: Archimedes_6 Start: 5387, Stop: 6001, Start Num: 22

Candidate Starts for Archimedes_6:

(Start: 22 @5387 has 4 MA's), (36, 5420), (53, 5489), (60, 5522), (63, 5534), (79, 5609), (85, 5636),

Gene: Argent26_16 Start: 9133, Stop: 9699, Start Num: 33

Candidate Starts for Argent26_16:

(Start: 33 @9133 has 132 MA's), (67, 9271), (83, 9361), (86, 9370), (109, 9490), (114, 9517), (132, 9583),

Gene: Ariel_23 Start: 13524, Stop: 14096, Start Num: 26

Candidate Starts for Ariel_23:

(Start: 26 @13524 has 6 MA's), (Start: 28 @13527 has 65 MA's), (64, 13668), (86, 13770), (98, 13812), (117, 13914), (125, 13941), (134, 13977), (140, 13998), (145, 14016), (154, 14049), (156, 14061), (162, 14082),

Gene: Ashwin_42 Start: 21487, Stop: 22092, Start Num: 28

Candidate Starts for Ashwin_42:

(Start: 28 @21487 has 65 MA's), (Start: 34 @21502 has 2 MA's), (51, 21565), (61, 21613), (63, 21622), (67, 21640), (86, 21730), (90, 21745), (109, 21847), (110, 21853), (120, 21895), (122, 21901), (125, 21910), (126, 21913), (127, 21922), (144, 21985), (159, 22042), (160, 22051), (165, 22078),

Gene: Asriel_14 Start: 8550, Stop: 9116, Start Num: 33

Candidate Starts for Asriel_14:

(Start: 33 @8550 has 132 MA's), (67, 8688), (83, 8778), (86, 8787), (109, 8907), (114, 8934), (132, 9000),

Gene: B3_8 Start: 6423, Stop: 6980, Start Num: 24

Candidate Starts for B3_8:

(Start: 24 @6423 has 8 MA's), (Start: 32 @6438 has 1 MA's), (52, 6495), (56, 6513), (57, 6516), (81, 6639), (92, 6672), (99, 6696), (100, 6699), (105, 6714), (109, 6750), (116, 6783), (118, 6792), (131, 6843), (140, 6876), (142, 6885), (148, 6906), (160, 6960),

Gene: BAKA_22 Start: 15634, Stop: 16203, Start Num: 28

Candidate Starts for BAKA_22:

(Start: 28 @15634 has 65 MA's), (98, 15919), (112, 16000), (119, 16030), (124, 16045), (125, 16048), (134, 16084), (136, 16090), (145, 16123), (162, 16189),

Gene: BFK20_ORF8 Start: 6306, Stop: 6848, Start Num: 25

Candidate Starts for BFK20_ORF8:

(Start: 25 @6306 has 2 MA's), (38, 6339), (46, 6366), (52, 6393), (53, 6402), (57, 6414), (59, 6423), (61, 6438), (83, 6546), (101, 6609), (108, 6642), (110, 6654), (119, 6687), (125, 6705), (139, 6765), (141, 6777),

Gene: BabeRuth_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for BabeRuth_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (58, 6042), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: BaboJay_14 Start: 9212, Stop: 9778, Start Num: 33

Candidate Starts for BaboJay_14:

(Start: 33 @9212 has 132 MA's), (67, 9350), (83, 9440), (86, 9449), (109, 9569), (114, 9596), (132, 9662),

Gene: Babsiella_9 Start: 6984, Stop: 7529, Start Num: 29

Candidate Starts for Babsiella_9:

(4, 6798), (Start: 29 @6984 has 14 MA's), (Start: 42 @7020 has 1 MA's), (61, 7107), (63, 7116), (72, 7161), (79, 7194), (110, 7320), (159, 7494), (164, 7515),

Gene: BadStone_14 Start: 9678, Stop: 10244, Start Num: 33

Candidate Starts for BadStone_14:

(Start: 33 @9678 has 132 MA's), (67, 9816), (83, 9906), (86, 9915), (109, 10035), (114, 10062), (132, 10128),

Gene: Bagrid_23 Start: 15423, Stop: 15992, Start Num: 28

Candidate Starts for Bagrid_23:

(Start: 28 @15423 has 65 MA's), (98, 15708), (112, 15789), (119, 15819), (124, 15834), (125, 15837), (134, 15873), (136, 15879), (145, 15912), (162, 15978),

Gene: Balomoji_14 Start: 9412, Stop: 9978, Start Num: 33

Candidate Starts for Balomoji_14:

(Start: 33 @9412 has 132 MA's), (67, 9550), (83, 9640), (86, 9649), (109, 9769), (114, 9796), (132, 9862),

Gene: Banquo_16 Start: 9976, Stop: 10500, Start Num: 29

Candidate Starts for Banquo_16:

(Start: 29 @9976 has 14 MA's), (66, 10117), (73, 10150), (106, 10267), (108, 10291), (118, 10333), (122, 10345), (139, 10411), (143, 10429), (148, 10447), (157, 10486), (158, 10489),

Gene: Barbarian_14 Start: 8550, Stop: 9116, Start Num: 33

Candidate Starts for Barbarian_14:

(Start: 33 @8550 has 132 MA's), (67, 8688), (83, 8778), (86, 8787), (109, 8907), (114, 8934), (132, 9000),

Gene: Bask21_14 Start: 8345, Stop: 8911, Start Num: 33

Candidate Starts for Bask21_14:

(Start: 33 @8345 has 132 MA's), (67, 8483), (83, 8573), (86, 8582), (109, 8702), (114, 8729), (132, 8795),

Gene: Becksu_14 Start: 9320, Stop: 9886, Start Num: 33

Candidate Starts for Becksu_14:

(Start: 33 @9320 has 132 MA's), (67, 9458), (83, 9548), (86, 9557), (109, 9677), (114, 9704), (132, 9770),

Gene: Beem_25 Start: 15989, Stop: 16558, Start Num: 28

Candidate Starts for Beem_25:

(Start: 28 @15989 has 65 MA's), (98, 16274), (112, 16355), (119, 16385), (124, 16400), (125, 16403), (134, 16439), (136, 16445), (145, 16478), (162, 16544),

Gene: Bench_16 Start: 9006, Stop: 9572, Start Num: 33

Candidate Starts for Bench_16:

(Start: 33 @9006 has 132 MA's), (67, 9144), (83, 9234), (86, 9243), (109, 9363), (114, 9390), (132, 9456),

Gene: BigBubba_14 Start: 8389, Stop: 8955, Start Num: 33

Candidate Starts for BigBubba_14:

(Start: 33 @8389 has 132 MA's), (67, 8527), (83, 8617), (86, 8626), (109, 8746), (114, 8773), (132, 8839),

Gene: BilboSwaggins_15 Start: 9679, Stop: 10245, Start Num: 33

Candidate Starts for BilboSwaggins_15:

(Start: 33 @9679 has 132 MA's), (67, 9817), (83, 9907), (86, 9916), (109, 10036), (114, 10063), (132, 10129),

Gene: Blessica_42 Start: 21890, Stop: 22495, Start Num: 28

Candidate Starts for Blessica_42:

(Start: 28 @21890 has 65 MA's), (Start: 34 @21905 has 2 MA's), (51, 21968), (61, 22016), (63, 22025), (67, 22043), (86, 22133), (90, 22148), (109, 22250), (110, 22256), (120, 22298), (122, 22304), (125, 22313), (126, 22316), (127, 22325), (144, 22388), (159, 22445), (160, 22454), (165, 22481),

Gene: Bluvara_9 Start: 6985, Stop: 7530, Start Num: 29

Candidate Starts for Bluvara_9:

(4, 6799), (6, 6886), (Start: 29 @6985 has 14 MA's), (Start: 42 @7021 has 1 MA's), (61, 7108), (63, 7117), (72, 7162), (79, 7195), (110, 7321), (123, 7372), (159, 7495), (164, 7516),

Gene: Bobby_26 Start: 15942, Stop: 16511, Start Num: 28

Candidate Starts for Bobby_26:

(Start: 28 @15942 has 65 MA's), (98, 16227), (112, 16308), (119, 16338), (125, 16356), (134, 16392), (136, 16398), (145, 16431), (162, 16497),

Gene: Bogg_15 Start: 8562, Stop: 9128, Start Num: 33

Candidate Starts for Bogg_15:

(Start: 33 @8562 has 132 MA's), (67, 8700), (83, 8790), (86, 8799), (109, 8919), (114, 8946), (132, 9012),

Gene: Bombitas_22 Start: 15299, Stop: 15868, Start Num: 28

Candidate Starts for Bombitas_22:

(Start: 28 @15299 has 65 MA's), (63, 15437), (78, 15506), (98, 15584), (112, 15665), (119, 15695), (124, 15710), (125, 15713), (134, 15749), (136, 15755), (145, 15788), (162, 15854),

Gene: Bora_38 Start: 20940, Stop: 21545, Start Num: 28

Candidate Starts for Bora_38:

(Start: 28 @20940 has 65 MA's), (Start: 34 @20955 has 2 MA's), (51, 21018), (61, 21066), (63, 21075), (67, 21093), (86, 21183), (90, 21198), (109, 21300), (110, 21306), (120, 21348), (122, 21354), (125, 21363), (126, 21366), (127, 21375), (144, 21438), (159, 21495), (160, 21504), (165, 21531),

Gene: Bosection6_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Bosection6_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: BrayBeast_8 Start: 6486, Stop: 7001, Start Num: 21

Candidate Starts for BrayBeast_8:

(Start: 19 @6483 has 2 MA's), (Start: 21 @6486 has 9 MA's), (Start: 35 @6516 has 1 MA's), (39, 6525), (40, 6528), (41, 6534), (66, 6648), (67, 6651), (91, 6750), (109, 6810), (117, 6834), (125, 6861), (134, 6897), (152, 6966),

Gene: Brewer_14 Start: 9388, Stop: 9954, Start Num: 33

Candidate Starts for Brewer_14:

(Start: 33 @9388 has 132 MA's), (67, 9526), (83, 9616), (86, 9625), (109, 9745), (114, 9772), (132, 9838),

Gene: BronnyJames_17 Start: 12159, Stop: 12728, Start Num: 28

Candidate Starts for BronnyJames_17:

(Start: 26 @12156 has 6 MA's), (Start: 28 @12159 has 65 MA's), (64, 12300), (86, 12402), (98, 12444), (117, 12546), (119, 12555), (125, 12573), (134, 12609), (140, 12630), (145, 12648), (154, 12681), (156, 12693), (162, 12714),

Gene: Bruin_14 Start: 9186, Stop: 9752, Start Num: 33

Candidate Starts for Bruin_14:

(Start: 33 @9186 has 132 MA's), (67, 9324), (83, 9414), (86, 9423), (109, 9543), (114, 9570), (132, 9636),

Gene: Brujita_9 Start: 7024, Stop: 7533, Start Num: 42

Candidate Starts for Brujita_9:

(Start: 29 @6988 has 14 MA's), (Start: 42 @7024 has 1 MA's), (44, 7033), (61, 7111), (63, 7120), (72, 7165), (79, 7198), (110, 7324), (123, 7375), (159, 7498), (164, 7519),

Gene: Buck_14 Start: 9635, Stop: 10201, Start Num: 33

Candidate Starts for Buck_14:

(Start: 33 @9635 has 132 MA's), (67, 9773), (83, 9863), (86, 9872), (109, 9992), (114, 10019), (132, 10085),

Gene: Budgie_16 Start: 8981, Stop: 9553, Start Num: 33

Candidate Starts for Budgie_16:

(Start: 33 @8981 has 132 MA's), (50, 9050), (55, 9071), (71, 9149), (76, 9167), (79, 9185), (83, 9215), (118, 9383), (132, 9437), (133, 9440),

Gene: BugsBunny_12 Start: 8752, Stop: 9318, Start Num: 33

Candidate Starts for BugsBunny_12:

(Start: 33 @8752 has 132 MA's), (67, 8890), (83, 8980), (86, 8989), (109, 9109), (114, 9136), (132, 9202),

Gene: Butters_8 Start: 5970, Stop: 6461, Start Num: 47

Candidate Starts for Butters_8:

(9, 5859), (12, 5871), (Start: 47 @5970 has 46 MA's), (57, 6009), (66, 6057), (72, 6087), (80, 6129), (88, 6156), (97, 6189), (110, 6246), (116, 6273), (122, 6294), (124, 6300), (144, 6369), (153, 6402), (163, 6444),

Gene: Cactus_16 Start: 8891, Stop: 9457, Start Num: 33

Candidate Starts for Cactus_16:

(Start: 33 @8891 has 132 MA's), (67, 9029), (83, 9119), (86, 9128), (109, 9248), (114, 9275), (132, 9341),

Gene: Carcharodon_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Carcharodon_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Catdawg_41 Start: 21594, Stop: 22184, Start Num: 34

Candidate Starts for Catdawg_41:

(Start: 28 @21579 has 65 MA's), (Start: 34 @21594 has 2 MA's), (51, 21657), (61, 21705), (63, 21714), (67, 21732), (86, 21822), (90, 21837), (109, 21939), (110, 21945), (120, 21987), (122, 21993), (125, 22002), (126, 22005), (127, 22014), (144, 22077), (159, 22134), (160, 22143), (165, 22170),

Gene: Catfish_11 Start: 7940, Stop: 8464, Start Num: 29

Candidate Starts for Catfish_11:

(15, 7898), (Start: 26 @7934 has 6 MA's), (Start: 29 @7940 has 14 MA's), (118, 8303), (122, 8315), (130, 8351), (139, 8381),

Gene: Charlie_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Charlie_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Chewbacca_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Chewbacca_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144,

6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: ChosenOne_13 Start: 8353, Stop: 8919, Start Num: 33

Candidate Starts for ChosenOne_13:

(Start: 33 @8353 has 132 MA's), (67, 8491), (83, 8581), (86, 8590), (109, 8710), (114, 8737), (132, 8803),

Gene: ChotaBhai_14 Start: 8389, Stop: 8955, Start Num: 33

Candidate Starts for ChotaBhai_14:

(Start: 33 @8389 has 132 MA's), (67, 8527), (83, 8617), (86, 8626), (109, 8746), (114, 8773), (132, 8839),

Gene: Chymera_9 Start: 7652, Stop: 8236, Start Num: 27

Candidate Starts for Chymera_9:

(Start: 27 @7652 has 1 MA's), (56, 7757), (80, 7889), (82, 7898), (94, 7937), (147, 8180),

Gene: Cjw1_14 Start: 9903, Stop: 10469, Start Num: 33

Candidate Starts for Cjw1_14:

(Start: 33 @9903 has 132 MA's), (67, 10041), (83, 10131), (86, 10140), (109, 10260), (114, 10287), (132, 10353),

Gene: CocoCinnamon_11 Start: 7693, Stop: 8205, Start Num: 21

Candidate Starts for CocoCinnamon_11:

(Start: 19 @7690 has 2 MA's), (Start: 21 @7693 has 9 MA's), (Start: 35 @7723 has 1 MA's), (39, 7732), (63, 7843), (67, 7858), (70, 7882), (78, 7909), (108, 8011), (111, 8026), (152, 8173),

Gene: Command613_16 Start: 9947, Stop: 10513, Start Num: 33

Candidate Starts for Command613_16:

(Start: 33 @9947 has 132 MA's), (67, 10085), (83, 10175), (86, 10184), (109, 10304), (114, 10331), (132, 10397),

Gene: Constella_20 Start: 14812, Stop: 15381, Start Num: 28

Candidate Starts for Constella_20:

(Start: 28 @14812 has 65 MA's), (63, 14950), (98, 15097), (112, 15178), (119, 15208), (124, 15223), (125, 15226), (134, 15262), (136, 15268), (145, 15301), (162, 15367),

Gene: Contagion_14 Start: 9186, Stop: 9752, Start Num: 33

Candidate Starts for Contagion_14:

(Start: 33 @9186 has 132 MA's), (67, 9324), (83, 9414), (86, 9423), (109, 9543), (114, 9570), (132, 9636),

Gene: Cookies_15 Start: 9551, Stop: 10117, Start Num: 33

Candidate Starts for Cookies_15:

(Start: 33 @9551 has 132 MA's), (67, 9689), (83, 9779), (86, 9788), (109, 9908), (114, 9935), (132, 10001),

Gene: Corndog_43 Start: 22037, Stop: 22642, Start Num: 28

Candidate Starts for Corndog_43:

(Start: 28 @22037 has 65 MA's), (51, 22115), (61, 22163), (63, 22172), (67, 22190), (75, 22226), (86, 22280), (90, 22295), (109, 22397), (110, 22403), (120, 22445), (122, 22451), (125, 22460), (126, 22463), (127, 22472), (144, 22535), (159, 22592), (160, 22601), (165, 22628),

Gene: Courthouse_23 Start: 13926, Stop: 14498, Start Num: 26

Candidate Starts for Courthouse_23:

(Start: 26 @13926 has 6 MA's), (Start: 28 @13929 has 65 MA's), (64, 14070), (86, 14172), (98, 14214), (117, 14316), (119, 14325), (125, 14343), (134, 14379), (140, 14400), (145, 14418), (154, 14451), (156, 14463), (162, 14484),

Gene: CrystalP_15 Start: 9679, Stop: 10245, Start Num: 33

Candidate Starts for CrystalP_15:

(Start: 33 @9679 has 132 MA's), (67, 9817), (83, 9907), (86, 9916), (109, 10036), (114, 10063), (132, 10129),

Gene: Cubone_7 Start: 5980, Stop: 6465, Start Num: 47

Candidate Starts for Cubone_7:

(9, 5866), (12, 5878), (Start: 47 @5980 has 46 MA's), (57, 6019), (66, 6067), (72, 6097), (80, 6139), (83, 6154), (88, 6166), (90, 6175), (97, 6199), (110, 6256), (116, 6277), (122, 6298), (144, 6373), (149, 6391), (153, 6406), (161, 6439), (163, 6448),

Gene: Czyszczone1_15 Start: 8888, Stop: 9454, Start Num: 33

Candidate Starts for Czyszczone1_15:

(Start: 33 @8888 has 132 MA's), (67, 9026), (83, 9116), (86, 9125), (109, 9245), (114, 9272), (132, 9338),

Gene: Daikon_13 Start: 9413, Stop: 9979, Start Num: 33

Candidate Starts for Daikon_13:

(Start: 33 @9413 has 132 MA's), (67, 9551), (83, 9641), (86, 9650), (109, 9770), (114, 9797), (132, 9863),

Gene: Dallas_25 Start: 15529, Stop: 16098, Start Num: 28

Candidate Starts for Dallas_25:

(Start: 28 @15529 has 65 MA's), (98, 15814), (112, 15895), (119, 15925), (124, 15940), (125, 15943), (134, 15979), (136, 15985), (145, 16018), (162, 16084),

Gene: Dardanus_14 Start: 9026, Stop: 9541, Start Num: 29

Candidate Starts for Dardanus_14:

(Start: 29 @9026 has 14 MA's), (Start: 33 @9032 has 132 MA's), (39, 9050), (Start: 45 @9071 has 2 MA's), (52, 9101), (60, 9143), (75, 9206), (80, 9239), (87, 9260), (99, 9299), (118, 9389), (121, 9398), (122, 9401), (127, 9422), (139, 9467), (144, 9488), (150, 9503), (157, 9530),

Gene: DearBasketball_8 Start: 6284, Stop: 6817, Start Num: 31

Candidate Starts for DearBasketball_8:

(Start: 31 @6284 has 7 MA's), (57, 6380), (67, 6431), (110, 6611), (158, 6806),

Gene: DinoDaryn_14 Start: 9110, Stop: 9634, Start Num: 29

Candidate Starts for DinoDaryn_14:

(Start: 29 @9110 has 14 MA's), (Start: 45 @9155 has 2 MA's), (61, 9230), (73, 9284), (79, 9314), (87, 9344), (106, 9401), (108, 9425), (119, 9470), (122, 9479), (139, 9545), (143, 9563), (148, 9581), (157, 9620),

Gene: DinoNuggs_9 Start: 6424, Stop: 6957, Start Num: 31

Candidate Starts for DinoNuggs_9:

(Start: 31 @6424 has 7 MA's), (61, 6544), (110, 6751), (152, 6922), (158, 6946),

Gene: DmpstrDiver_24 Start: 16165, Stop: 16734, Start Num: 28

Candidate Starts for DmpstrDiver_24:

(Start: 28 @16165 has 65 MA's), (98, 16450), (112, 16531), (119, 16561), (124, 16576), (125, 16579), (134, 16615), (136, 16621), (145, 16654), (162, 16720),

Gene: DoctorDiddles_15 Start: 8844, Stop: 9410, Start Num: 33

Candidate Starts for DoctorDiddles_15:

(Start: 33 @8844 has 132 MA's), (67, 8982), (83, 9072), (86, 9081), (109, 9201), (114, 9228), (132, 9294),

Gene: DonkeyMan_8 Start: 6278, Stop: 6811, Start Num: 31

Candidate Starts for DonkeyMan_8:

(Start: 31 @6278 has 7 MA's), (57, 6374), (67, 6425), (69, 6431), (110, 6605), (158, 6800),

Gene: Dove_23 Start: 15298, Stop: 15867, Start Num: 28

Candidate Starts for Dove_23:

(Start: 28 @15298 has 65 MA's), (63, 15436), (78, 15505), (98, 15583), (112, 15664), (119, 15694), (124, 15709), (125, 15712), (134, 15748), (136, 15754), (145, 15787), (162, 15853),

Gene: DrDrey_15 Start: 9629, Stop: 10195, Start Num: 33

Candidate Starts for DrDrey_15:

(Start: 33 @9629 has 132 MA's), (67, 9767), (83, 9857), (86, 9866), (109, 9986), (114, 10013), (132, 10079),

Gene: Duke13_22 Start: 15563, Stop: 16132, Start Num: 28

Candidate Starts for Duke13_22:

(Start: 28 @15563 has 65 MA's), (63, 15701), (98, 15848), (112, 15929), (119, 15959), (124, 15974), (125, 15977), (134, 16013), (136, 16019), (145, 16052), (162, 16118),

Gene: Dumbo_14 Start: 8610, Stop: 9176, Start Num: 33

Candidate Starts for Dumbo_14:

(Start: 33 @8610 has 132 MA's), (67, 8748), (83, 8838), (86, 8847), (109, 8967), (114, 8994), (132, 9060),

Gene: Duplicity_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Duplicity_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Dusk_14 Start: 9338, Stop: 9904, Start Num: 33

Candidate Starts for Dusk_14:

(Start: 33 @9338 has 132 MA's), (67, 9476), (83, 9566), (86, 9575), (109, 9695), (114, 9722), (132, 9788),

Gene: Dylan_40 Start: 21292, Stop: 21897, Start Num: 28

Candidate Starts for Dylan_40:

(Start: 28 @21292 has 65 MA's), (Start: 34 @21307 has 2 MA's), (51, 21370), (61, 21418), (63, 21427), (67, 21445), (86, 21535), (90, 21550), (109, 21652), (110, 21658), (120, 21700), (122, 21706), (125, 21715), (126, 21718), (127, 21727), (144, 21790), (159, 21847), (160, 21856), (165, 21883),

Gene: E1_8 Start: 6423, Stop: 6980, Start Num: 24

Candidate Starts for E1_8:

(Start: 24 @6423 has 8 MA's), (Start: 32 @6438 has 1 MA's), (52, 6495), (56, 6513), (57, 6516), (81, 6639), (92, 6672), (99, 6696), (100, 6699), (105, 6714), (109, 6750), (116, 6783), (118, 6792), (131,

6843), (140, 6876), (142, 6885), (148, 6906), (160, 6960),

Gene: EGUunicorn_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for EGUunicorn_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Easy2Say_15 Start: 9876, Stop: 10442, Start Num: 33

Candidate Starts for Easy2Say_15:

(Start: 33 @9876 has 132 MA's), (67, 10014), (83, 10104), (86, 10113), (109, 10233), (114, 10260), (132, 10326),

Gene: Ejimix_26 Start: 16739, Stop: 17308, Start Num: 28

Candidate Starts for Ejimix_26:

(Start: 28 @16739 has 65 MA's), (98, 17024), (112, 17105), (119, 17135), (124, 17150), (125, 17153), (134, 17189), (136, 17195), (145, 17228), (162, 17294),

Gene: Elite2014_13 Start: 8353, Stop: 8919, Start Num: 33

Candidate Starts for Elite2014_13:

(Start: 33 @8353 has 132 MA's), (67, 8491), (83, 8581), (86, 8590), (109, 8710), (114, 8737), (132, 8803),

Gene: Elph10_15 Start: 8613, Stop: 9179, Start Num: 33

Candidate Starts for Elph10_15:

(Start: 33 @8613 has 132 MA's), (67, 8751), (83, 8841), (86, 8850), (109, 8970), (114, 8997), (132, 9063),

Gene: Emmina_14 Start: 8458, Stop: 9024, Start Num: 33

Candidate Starts for Emmina_14:

(Start: 33 @8458 has 132 MA's), (67, 8596), (83, 8686), (86, 8695), (109, 8815), (114, 8842), (132, 8908),

Gene: EricMillard_25 Start: 16275, Stop: 16844, Start Num: 28

Candidate Starts for EricMillard_25:

(Start: 28 @16275 has 65 MA's), (98, 16560), (112, 16641), (119, 16671), (124, 16686), (125, 16689), (134, 16725), (136, 16731), (145, 16764), (162, 16830),

Gene: Eureka_15 Start: 9658, Stop: 10224, Start Num: 33

Candidate Starts for Eureka_15:

(Start: 33 @9658 has 132 MA's), (67, 9796), (83, 9886), (86, 9895), (109, 10015), (114, 10042), (132, 10108),

Gene: EvenBluerMoon_9 Start: 7623, Stop: 8138, Start Num: 21

Candidate Starts for EvenBluerMoon_9:

(Start: 21 @7623 has 9 MA's),

Gene: FairyPath_15 Start: 9876, Stop: 10442, Start Num: 33

Candidate Starts for FairyPath_15:

(Start: 33 @9876 has 132 MA's), (67, 10014), (83, 10104), (86, 10113), (109, 10233), (114, 10260), (132, 10326),

Gene: Familton_42 Start: 21583, Stop: 22188, Start Num: 28

Candidate Starts for Familton_42:

(Start: 28 @21583 has 65 MA's), (Start: 34 @21598 has 2 MA's), (51, 21661), (61, 21709), (63, 21718), (67, 21736), (86, 21826), (90, 21841), (109, 21943), (110, 21949), (120, 21991), (122, 21997), (125, 22006), (126, 22009), (127, 22018), (144, 22081), (159, 22138), (160, 22147), (165, 22174),

Gene: Filch_15 Start: 8898, Stop: 9464, Start Num: 33

Candidate Starts for Filch_15:

(Start: 33 @8898 has 132 MA's), (67, 9036), (83, 9126), (86, 9135), (109, 9255), (114, 9282), (132, 9348),

Gene: FireRed_14 Start: 9186, Stop: 9752, Start Num: 33

Candidate Starts for FireRed_14:

(Start: 33 @9186 has 132 MA's), (67, 9324), (83, 9414), (86, 9423), (109, 9543), (114, 9570), (132, 9636),

Gene: Firecracker_41 Start: 21190, Stop: 21795, Start Num: 28

Candidate Starts for Firecracker_41:

(Start: 28 @21190 has 65 MA's), (Start: 34 @21205 has 2 MA's), (51, 21268), (61, 21316), (63, 21325), (67, 21343), (86, 21433), (90, 21448), (109, 21550), (110, 21556), (122, 21604), (125, 21613), (126, 21616), (127, 21625), (144, 21688), (159, 21745), (160, 21754), (165, 21781),

Gene: Flypotenuse_13 Start: 9295, Stop: 9861, Start Num: 33

Candidate Starts for Flypotenuse_13:

(Start: 33 @9295 has 132 MA's), (67, 9433), (83, 9523), (86, 9532), (109, 9652), (114, 9679), (132, 9745),

Gene: FoghornLeghorn_14 Start: 9183, Stop: 9749, Start Num: 33

Candidate Starts for FoghornLeghorn_14:

(Start: 33 @9183 has 132 MA's), (67, 9321), (83, 9411), (86, 9420), (109, 9540), (114, 9567), (132, 9633),

Gene: FoulBall_41 Start: 21577, Stop: 22182, Start Num: 28

Candidate Starts for FoulBall_41:

(Start: 28 @21577 has 65 MA's), (Start: 34 @21592 has 2 MA's), (51, 21655), (61, 21703), (63, 21712), (67, 21730), (86, 21820), (90, 21835), (109, 21937), (110, 21943), (120, 21985), (122, 21991), (125, 22000), (126, 22003), (127, 22012), (144, 22075), (159, 22132), (160, 22141), (165, 22168),

Gene: Frizzle_6 Start: 5444, Stop: 6055, Start Num: 22

Candidate Starts for Frizzle_6:

(Start: 22 @5444 has 4 MA's), (39, 5483), (63, 5591), (79, 5666), (90, 5711), (105, 5768), (116, 5849), (118, 5858), (128, 5894), (129, 5897), (139, 5927), (146, 5954),

Gene: Fulbright_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Fulbright_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Gage_16 Start: 9133, Stop: 9699, Start Num: 33

Candidate Starts for Gage_16:

(Start: 33 @9133 has 132 MA's), (67, 9271), (83, 9361), (86, 9370), (109, 9490), (114, 9517), (132, 9583),

Gene: Gator_13 Start: 9294, Stop: 9860, Start Num: 33

Candidate Starts for Gator_13:

(Start: 33 @9294 has 132 MA's), (67, 9432), (83, 9522), (86, 9531), (109, 9651), (114, 9678), (132, 9744),

Gene: Gemini_16 Start: 9133, Stop: 9699, Start Num: 33

Candidate Starts for Gemini_16:

(Start: 33 @9133 has 132 MA's), (67, 9271), (83, 9361), (86, 9370), (109, 9490), (114, 9517), (132, 9583),

Gene: Gex_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Gex_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Ghobes_6 Start: 5444, Stop: 6055, Start Num: 22

Candidate Starts for Ghobes_6:

(Start: 22 @5444 has 4 MA's), (39, 5483), (63, 5591), (79, 5666), (85, 5693), (90, 5711), (105, 5768), (116, 5849), (128, 5894), (129, 5897), (139, 5927), (146, 5954),

Gene: Gibbzilla_9 Start: 6357, Stop: 6959, Start Num: 14

Candidate Starts for Gibbzilla_9:

(14, 6357), (56, 6498), (62, 6534), (66, 6552), (77, 6606), (79, 6615), (98, 6675), (121, 6801), (122, 6804), (135, 6852), (141, 6876), (159, 6951),

Gene: Glexan_13 Start: 9295, Stop: 9861, Start Num: 33

Candidate Starts for Glexan_13:

(Start: 33 @9295 has 132 MA's), (67, 9433), (83, 9523), (86, 9532), (109, 9652), (114, 9679), (132, 9745),

Gene: Goib_13 Start: 8885, Stop: 9409, Start Num: 29

Candidate Starts for Goib_13:

(Start: 29 @8885 has 14 MA's), (Start: 45 @8930 has 2 MA's), (61, 9005), (73, 9059), (79, 9089), (87, 9119), (106, 9176), (108, 9200), (119, 9245), (121, 9251), (122, 9254), (139, 9320), (143, 9338), (148, 9356), (157, 9395),

Gene: Goku_15 Start: 9385, Stop: 9951, Start Num: 33

Candidate Starts for Goku_15:

(Start: 33 @9385 has 132 MA's), (67, 9523), (83, 9613), (86, 9622), (109, 9742), (114, 9769), (132, 9835),

Gene: GoldenSpark_16 Start: 9133, Stop: 9699, Start Num: 33

Candidate Starts for GoldenSpark_16:

(Start: 33 @9133 has 132 MA's), (67, 9271), (83, 9361), (86, 9370), (109, 9490), (114, 9517), (132, 9583),

Gene: Goldilocks_16 Start: 9089, Stop: 9655, Start Num: 33

Candidate Starts for Goldilocks_16:

(Start: 33 @9089 has 132 MA's), (67, 9227), (83, 9317), (86, 9326), (109, 9446), (114, 9473), (132, 9539),

Gene: Gonephishing_21 Start: 14102, Stop: 14671, Start Num: 28

Candidate Starts for Gonephishing_21:

(Start: 26 @14099 has 6 MA's), (Start: 28 @14102 has 65 MA's), (64, 14243), (86, 14345), (98, 14387), (117, 14489), (119, 14498), (125, 14516), (134, 14552), (140, 14573), (145, 14591), (154, 14624), (156, 14636), (162, 14657),

Gene: GooberAzure_16 Start: 9133, Stop: 9699, Start Num: 33

Candidate Starts for GooberAzure_16:

(Start: 33 @9133 has 132 MA's), (67, 9271), (83, 9361), (86, 9370), (109, 9490), (114, 9517), (132, 9583),

Gene: Greep_15 Start: 9463, Stop: 10029, Start Num: 33

Candidate Starts for Greep_15:

(Start: 33 @9463 has 132 MA's), (67, 9601), (83, 9691), (86, 9700), (109, 9820), (114, 9847), (132, 9913),

Gene: Gspu1_10 Start: 7323, Stop: 7862, Start Num: 17

Candidate Starts for Gspu1_10:

(17, 7323), (Start: 29 @7341 has 14 MA's), (61, 7464), (67, 7488), (87, 7578), (106, 7635), (110, 7671), (123, 7716), (136, 7770), (139, 7779), (146, 7806), (147, 7809), (151, 7830), (157, 7854),

Gene: Gustav_7 Start: 6033, Stop: 6599, Start Num: 24

Candidate Starts for Gustav_7:

(Start: 24 @6033 has 8 MA's), (Start: 45 @6093 has 2 MA's), (54, 6141), (61, 6174), (65, 6186), (69, 6204), (72, 6225), (109, 6378), (110, 6384), (115, 6408), (122, 6444), (137, 6507), (148, 6546), (156, 6582),

Gene: HC_09 Start: 6987, Stop: 7532, Start Num: 29

Candidate Starts for HC_09:

(4, 6801), (6, 6888), (Start: 29 @6987 has 14 MA's), (Start: 42 @7023 has 1 MA's), (61, 7110), (63, 7119), (72, 7164), (79, 7197), (110, 7323), (123, 7374), (159, 7497), (164, 7518),

Gene: Halley_25 Start: 15988, Stop: 16557, Start Num: 28

Candidate Starts for Halley_25:

(Start: 28 @15988 has 65 MA's), (98, 16273), (112, 16354), (119, 16384), (124, 16399), (125, 16402), (134, 16438), (136, 16444), (145, 16477), (162, 16543),

Gene: HanKaySha_15 Start: 8888, Stop: 9454, Start Num: 33

Candidate Starts for HanKaySha_15:

(Start: 33 @8888 has 132 MA's), (67, 9026), (83, 9116), (86, 9125), (109, 9245), (114, 9272), (132, 9338),

Gene: Hanako_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for Hanako_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (58, 6042), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Hannaconda_20 Start: 12609, Stop: 13178, Start Num: 28

Candidate Starts for Hannaconda_20:

(Start: 26 @12606 has 6 MA's), (Start: 28 @12609 has 65 MA's), (64, 12750), (86, 12852), (98, 12894), (117, 12996), (119, 13005), (125, 13023), (129, 13041), (134, 13059), (140, 13080), (145, 13098), (154, 13131), (156, 13143), (162, 13164),

Gene: Harella_13 Start: 9295, Stop: 9861, Start Num: 33
Candidate Starts for Harella_13:
(Start: 33 @9295 has 132 MA's), (67, 9433), (83, 9523), (86, 9532), (109, 9652), (114, 9679), (132, 9745),

Gene: Heinz_8 Start: 6314, Stop: 6847, Start Num: 31
Candidate Starts for Heinz_8:
(Start: 31 @6314 has 7 MA's), (61, 6434), (110, 6641), (137, 6752), (152, 6812), (158, 6836),

Gene: Henry_15 Start: 9678, Stop: 10244, Start Num: 33
Candidate Starts for Henry_15:
(Start: 33 @9678 has 132 MA's), (67, 9816), (83, 9906), (86, 9915), (109, 10035), (114, 10062), (132, 10128),

Gene: Hereford_10 Start: 7768, Stop: 8283, Start Num: 21
Candidate Starts for Hereford_10:
(Start: 21 @7768 has 9 MA's),

Gene: Hibiscus_8 Start: 6288, Stop: 6821, Start Num: 31
Candidate Starts for Hibiscus_8:
(Start: 31 @6288 has 7 MA's), (61, 6408), (110, 6615), (116, 6642), (152, 6786), (158, 6810),

Gene: Hidrated_25 Start: 16104, Stop: 16673, Start Num: 28
Candidate Starts for Hidrated_25:
(Start: 28 @16104 has 65 MA's), (78, 16311), (98, 16389), (112, 16470), (119, 16500), (124, 16515), (125, 16518), (134, 16554), (136, 16560), (145, 16593), (157, 16641), (162, 16659),

Gene: Highbury_15 Start: 8807, Stop: 9373, Start Num: 33
Candidate Starts for Highbury_15:
(Start: 33 @8807 has 132 MA's), (67, 8945), (83, 9035), (86, 9044), (109, 9164), (114, 9191), (132, 9257),

Gene: HokkenD_20 Start: 15558, Stop: 16127, Start Num: 28
Candidate Starts for HokkenD_20:
(Start: 28 @15558 has 65 MA's), (98, 15843), (112, 15924), (119, 15954), (124, 15969), (125, 15972), (134, 16008), (136, 16014), (145, 16047), (162, 16113),

Gene: Holt_16 Start: 8962, Stop: 9528, Start Num: 33
Candidate Starts for Holt_16:
(Start: 33 @8962 has 132 MA's), (67, 9100), (83, 9190), (86, 9199), (109, 9319), (114, 9346), (132, 9412),

Gene: Hoonter_16 Start: 9133, Stop: 9699, Start Num: 33
Candidate Starts for Hoonter_16:
(Start: 33 @9133 has 132 MA's), (67, 9271), (83, 9361), (86, 9370), (109, 9490), (114, 9517), (132, 9583),

Gene: Hokey_15 Start: 8898, Stop: 9464, Start Num: 33
Candidate Starts for Hokey_15:
(Start: 33 @8898 has 132 MA's), (67, 9036), (83, 9126), (86, 9135), (109, 9255), (114, 9282), (132, 9348),

Gene: HufflyPuff_13 Start: 9142, Stop: 9708, Start Num: 33

Candidate Starts for HufflyPuff_13:

(Start: 33 @9142 has 132 MA's), (67, 9280), (83, 9370), (86, 9379), (109, 9499), (114, 9526), (132, 9592),

Gene: Huffly_14 Start: 9110, Stop: 9634, Start Num: 29

Candidate Starts for Huffly_14:

(Start: 29 @9110 has 14 MA's), (Start: 45 @9155 has 2 MA's), (61, 9230), (73, 9284), (79, 9314), (87, 9344), (106, 9401), (108, 9425), (119, 9470), (122, 9479), (139, 9545), (143, 9563), (148, 9581), (157, 9620),

Gene: Hughesyang_24 Start: 16171, Stop: 16740, Start Num: 28

Candidate Starts for Hughesyang_24:

(Start: 28 @16171 has 65 MA's), (78, 16378), (98, 16456), (112, 16537), (119, 16567), (124, 16582), (125, 16585), (134, 16621), (136, 16627), (145, 16660), (162, 16726),

Gene: IHOP_14 Start: 9338, Stop: 9904, Start Num: 33

Candidate Starts for IHOP_14:

(Start: 33 @9338 has 132 MA's), (67, 9476), (83, 9566), (86, 9575), (109, 9695), (114, 9722), (132, 9788),

Gene: Icee_14 Start: 9338, Stop: 9904, Start Num: 33

Candidate Starts for Icee_14:

(Start: 33 @9338 has 132 MA's), (67, 9476), (83, 9566), (86, 9575), (109, 9695), (114, 9722), (132, 9788),

Gene: Idergollasper_41 Start: 21577, Stop: 22182, Start Num: 28

Candidate Starts for Idergollasper_41:

(Start: 28 @21577 has 65 MA's), (Start: 34 @21592 has 2 MA's), (51, 21655), (61, 21703), (63, 21712), (67, 21730), (86, 21820), (90, 21835), (109, 21937), (110, 21943), (120, 21985), (122, 21991), (125, 22000), (126, 22003), (127, 22012), (144, 22075), (159, 22132), (160, 22141), (165, 22168),

Gene: Imara_39 Start: 21386, Stop: 21991, Start Num: 28

Candidate Starts for Imara_39:

(Start: 28 @21386 has 65 MA's), (Start: 34 @21401 has 2 MA's), (51, 21464), (61, 21512), (63, 21521), (86, 21629), (90, 21644), (109, 21746), (110, 21752), (120, 21794), (122, 21800), (125, 21809), (126, 21812), (127, 21821), (144, 21884), (159, 21941), (160, 21950), (165, 21977),

Gene: Impisi_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for Impisi_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Inca_14 Start: 8358, Stop: 8924, Start Num: 33

Candidate Starts for Inca_14:

(Start: 33 @8358 has 132 MA's), (67, 8496), (83, 8586), (86, 8595), (109, 8715), (114, 8742), (132, 8808),

Gene: Island3_9 Start: 6988, Stop: 7533, Start Num: 29

Candidate Starts for Island3_9:

(Start: 29 @6988 has 14 MA's), (Start: 42 @7024 has 1 MA's), (44, 7033), (61, 7111), (63, 7120), (72, 7165), (79, 7198), (110, 7324), (123, 7375), (159, 7498), (164, 7519),

Gene: Jamie19_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for Jamie19_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (58, 6042), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: JanetJ_9 Start: 7405, Stop: 7920, Start Num: 21

Candidate Starts for JanetJ_9:

(Start: 21 @7405 has 9 MA's),

Gene: JangDynasty_41 Start: 21672, Stop: 22277, Start Num: 28

Candidate Starts for JangDynasty_41:

(Start: 28 @21672 has 65 MA's), (Start: 34 @21687 has 2 MA's), (51, 21750), (61, 21798), (63, 21807), (67, 21825), (86, 21915), (90, 21930), (109, 22032), (110, 22038), (120, 22080), (122, 22086), (125, 22095), (126, 22098), (127, 22107), (144, 22170), (159, 22227), (160, 22236), (165, 22263),

Gene: JeTaime_16 Start: 9938, Stop: 10504, Start Num: 33

Candidate Starts for JeTaime_16:

(Start: 33 @9938 has 132 MA's), (67, 10076), (83, 10166), (86, 10175), (109, 10295), (114, 10322), (132, 10388),

Gene: JeanClaude_8 Start: 6390, Stop: 6908, Start Num: 19

Candidate Starts for JeanClaude_8:

(Start: 19 @6390 has 2 MA's), (Start: 21 @6393 has 9 MA's), (Start: 35 @6423 has 1 MA's), (39, 6432), (40, 6435), (41, 6441), (67, 6558), (70, 6582), (108, 6711), (117, 6741), (125, 6768), (142, 6834), (152, 6873),

Gene: Jojo24_8 Start: 6283, Stop: 6816, Start Num: 31

Candidate Starts for Jojo24_8:

(Start: 31 @6283 has 7 MA's), (61, 6403), (75, 6463), (110, 6610), (116, 6637), (152, 6781), (158, 6805),

Gene: Journey_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Journey_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: JuicyJay_27 Start: 16822, Stop: 17391, Start Num: 28

Candidate Starts for JuicyJay_27:

(Start: 28 @16822 has 65 MA's), (63, 16960), (98, 17107), (112, 17188), (119, 17218), (124, 17233), (125, 17236), (134, 17272), (136, 17278), (145, 17311), (162, 17377),

Gene: Kalah2_26 Start: 16590, Stop: 17159, Start Num: 28

Candidate Starts for Kalah2_26:

(Start: 28 @16590 has 65 MA's), (98, 16875), (112, 16956), (119, 16986), (124, 17001), (125, 17004), (134, 17040), (136, 17046), (145, 17079), (162, 17145),

Gene: Kanye_16 Start: 10126, Stop: 10692, Start Num: 33

Candidate Starts for Kanye_16:

(Start: 33 @10126 has 132 MA's), (67, 10264), (83, 10354), (86, 10363), (109, 10483), (114, 10510), (132, 10576),

Gene: KashFlow_17 Start: 12175, Stop: 12744, Start Num: 28

Candidate Starts for KashFlow_17:

(Start: 26 @12172 has 6 MA's), (Start: 28 @12175 has 65 MA's), (64, 12316), (86, 12418), (98, 12460), (117, 12562), (125, 12589), (140, 12646), (145, 12664), (154, 12697), (162, 12730),

Gene: Kevin1_8 Start: 5970, Stop: 6461, Start Num: 47

Candidate Starts for Kevin1_8:

(9, 5859), (12, 5871), (Start: 47 @5970 has 46 MA's), (57, 6009), (72, 6087), (80, 6129), (88, 6156), (97, 6189), (110, 6246), (116, 6273), (122, 6294), (124, 6300), (144, 6369), (153, 6402), (163, 6444),

Gene: Khuang_7 Start: 5855, Stop: 6379, Start Num: 32

Candidate Starts for Khuang_7:

(Start: 32 @5855 has 1 MA's), (109, 6161), (118, 6197), (132, 6251), (139, 6275),

Gene: Kimchi_16 Start: 9133, Stop: 9699, Start Num: 33

Candidate Starts for Kimchi_16:

(Start: 33 @9133 has 132 MA's), (67, 9271), (83, 9361), (86, 9370), (109, 9490), (114, 9517), (132, 9583),

Gene: KingPhillip3_40 Start: 21577, Stop: 22182, Start Num: 28

Candidate Starts for KingPhillip3_40:

(Start: 28 @21577 has 65 MA's), (Start: 34 @21592 has 2 MA's), (51, 21655), (61, 21703), (63, 21712), (67, 21730), (86, 21820), (90, 21835), (109, 21937), (110, 21943), (120, 21985), (122, 21991), (125, 22000), (126, 22003), (127, 22012), (144, 22075), (159, 22132), (160, 22141), (165, 22168),

Gene: Klein_25 Start: 15568, Stop: 16137, Start Num: 28

Candidate Starts for Klein_25:

(Start: 28 @15568 has 65 MA's), (63, 15706), (78, 15775), (98, 15853), (112, 15934), (119, 15964), (124, 15979), (125, 15982), (134, 16018), (136, 16024), (145, 16057), (162, 16123),

Gene: Kostya_15 Start: 9678, Stop: 10244, Start Num: 33

Candidate Starts for Kostya_15:

(Start: 33 @9678 has 132 MA's), (67, 9816), (83, 9906), (86, 9915), (109, 10035), (114, 10062), (132, 10128),

Gene: Krili_40 Start: 21294, Stop: 21899, Start Num: 28

Candidate Starts for Krili_40:

(Start: 28 @21294 has 65 MA's), (51, 21372), (61, 21420), (63, 21429), (67, 21447), (86, 21537), (90, 21552), (109, 21654), (110, 21660), (122, 21708), (125, 21717), (126, 21720), (127, 21729), (144, 21792), (159, 21849), (160, 21858), (165, 21885),

Gene: Kumotta_9 Start: 7342, Stop: 7839, Start Num: 34

Candidate Starts for Kumotta_9:

(Start: 34 @7342 has 2 MA's), (Start: 35 @7345 has 1 MA's), (39, 7357), (43, 7375), (51, 7411), (72, 7510), (79, 7543), (93, 7591), (98, 7606), (124, 7696), (125, 7699), (134, 7735), (142, 7765),

Gene: Lilac_16 Start: 8634, Stop: 9200, Start Num: 33

Candidate Starts for Lilac_16:

(Start: 33 @8634 has 132 MA's), (67, 8772), (83, 8862), (86, 8871), (109, 8991), (114, 9018), (132, 9084),

Gene: Lilizi_16 Start: 8845, Stop: 9411, Start Num: 33

Candidate Starts for Lilizi_16:

(Start: 33 @8845 has 132 MA's), (67, 8983), (83, 9073), (86, 9082), (109, 9202), (114, 9229), (132, 9295),

Gene: Lilpickle_13 Start: 8353, Stop: 8919, Start Num: 33

Candidate Starts for Lilpickle_13:

(Start: 33 @8353 has 132 MA's), (67, 8491), (83, 8581), (86, 8590), (109, 8710), (114, 8737), (132, 8803),

Gene: LittleE_23 Start: 15311, Stop: 15883, Start Num: 26

Candidate Starts for LittleE_23:

(Start: 26 @15311 has 6 MA's), (Start: 28 @15314 has 65 MA's), (64, 15455), (86, 15557), (98, 15599), (117, 15701), (119, 15710), (125, 15728), (134, 15764), (140, 15785), (145, 15803), (154, 15836), (156, 15848), (162, 15869),

Gene: Liveloughbron_14 Start: 9276, Stop: 9842, Start Num: 33

Candidate Starts for Liveloughbron_14:

(Start: 33 @9276 has 132 MA's), (67, 9414), (83, 9504), (86, 9513), (109, 9633), (114, 9660), (132, 9726),

Gene: Lucky2013_23 Start: 14054, Stop: 14626, Start Num: 26

Candidate Starts for Lucky2013_23:

(Start: 26 @14054 has 6 MA's), (Start: 28 @14057 has 65 MA's), (64, 14198), (86, 14300), (98, 14342), (117, 14444), (125, 14471), (140, 14528), (145, 14546), (154, 14579), (162, 14612),

Gene: MISSy_14 Start: 9186, Stop: 9752, Start Num: 33

Candidate Starts for MISSy_14:

(Start: 33 @9186 has 132 MA's), (67, 9324), (83, 9414), (86, 9423), (109, 9543), (114, 9570), (132, 9636),

Gene: MPhalcon_14 Start: 9186, Stop: 9752, Start Num: 33

Candidate Starts for MPhalcon_14:

(Start: 33 @9186 has 132 MA's), (67, 9324), (83, 9414), (86, 9423), (109, 9543), (114, 9570), (132, 9636),

Gene: MadKillah_42 Start: 21516, Stop: 22121, Start Num: 28

Candidate Starts for MadKillah_42:

(Start: 28 @21516 has 65 MA's), (Start: 34 @21531 has 2 MA's), (51, 21594), (61, 21642), (63, 21651), (67, 21669), (86, 21759), (90, 21774), (109, 21876), (110, 21882), (120, 21924), (122, 21930), (125, 21939), (126, 21942), (127, 21951), (144, 22014), (159, 22071), (160, 22080), (165, 22107),

Gene: MadamMonkfish_14 Start: 8564, Stop: 9130, Start Num: 33

Candidate Starts for MadamMonkfish_14:

(Start: 33 @8564 has 132 MA's), (67, 8702), (83, 8792), (86, 8801), (109, 8921), (114, 8948), (132, 9014),

Gene: Magsby_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Magsby_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Mahdia_7 Start: 6047, Stop: 6601, Start Num: 24

Candidate Starts for Mahdia_7:

(Start: 24 @6047 has 8 MA's), (Start: 45 @6107 has 2 MA's), (54, 6155), (61, 6188), (65, 6200), (69, 6218), (72, 6239), (102, 6356), (109, 6395), (127, 6467), (137, 6509),

Gene: Maja_8 Start: 6915, Stop: 7427, Start Num: 21

Candidate Starts for Maja_8:

(3, 6702), (Start: 19 @6912 has 2 MA's), (Start: 21 @6915 has 9 MA's), (39, 6954), (63, 7065), (67, 7080), (70, 7104), (78, 7131), (91, 7179), (108, 7233), (109, 7239), (111, 7248), (149, 7383),

Gene: Manda_15 Start: 9648, Stop: 10214, Start Num: 33

Candidate Starts for Manda_15:

(Start: 33 @9648 has 132 MA's), (67, 9786), (83, 9876), (86, 9885), (109, 10005), (114, 10032), (132, 10098),

Gene: MargaretKali_9 Start: 6988, Stop: 7473, Start Num: 35

Candidate Starts for MargaretKali_9:

(Start: 35 @6988 has 1 MA's), (39, 6997), (57, 7075), (63, 7108), (69, 7129), (70, 7147), (80, 7189), (121, 7321), (128, 7348),

Gene: Marleymoo_26 Start: 16649, Stop: 17218, Start Num: 28

Candidate Starts for Marleymoo_26:

(Start: 28 @16649 has 65 MA's), (78, 16856), (98, 16934), (112, 17015), (119, 17045), (124, 17060), (125, 17063), (134, 17099), (136, 17105), (145, 17138), (157, 17186), (162, 17204),

Gene: Marshmallow_15 Start: 9678, Stop: 10244, Start Num: 33

Candidate Starts for Marshmallow_15:

(Start: 33 @9678 has 132 MA's), (67, 9816), (83, 9906), (86, 9915), (109, 10035), (114, 10062), (132, 10128),

Gene: Maxxinista_15 Start: 8613, Stop: 9179, Start Num: 33

Candidate Starts for Maxxinista_15:

(Start: 33 @8613 has 132 MA's), (67, 8751), (83, 8841), (86, 8850), (109, 8970), (114, 8997), (132, 9063),

Gene: Melville_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Melville_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: MiaZeal_23 Start: 13745, Stop: 14317, Start Num: 26

Candidate Starts for MiaZeal_23:

(Start: 26 @13745 has 6 MA's), (Start: 28 @13748 has 65 MA's), (64, 13889), (86, 13991), (98, 14033), (117, 14135), (119, 14144), (125, 14162), (134, 14198), (140, 14219), (145, 14237), (154, 14270), (156, 14282), (162, 14303),

Gene: MichelleMyBell_8 Start: 5990, Stop: 6481, Start Num: 47

Candidate Starts for MichelleMyBell_8:

(7, 5834), (9, 5879), (12, 5891), (Start: 47 @5990 has 46 MA's), (57, 6029), (66, 6077), (72, 6107), (80, 6149), (88, 6176), (97, 6209), (110, 6266), (116, 6293), (122, 6314), (124, 6320), (144, 6389), (153, 6422), (163, 6464),

Gene: Mindy_15 Start: 9457, Stop: 10023, Start Num: 33

Candidate Starts for Mindy_15:

(Start: 33 @9457 has 132 MA's), (67, 9595), (83, 9685), (86, 9694), (109, 9814), (114, 9841), (132, 9907),

Gene: Minerva_25 Start: 16053, Stop: 16622, Start Num: 28

Candidate Starts for Minerva_25:

(Start: 28 @16053 has 65 MA's), (63, 16191), (98, 16338), (112, 16419), (119, 16449), (124, 16464), (125, 16467), (134, 16503), (136, 16509), (145, 16542), (162, 16608),

Gene: Miniwave_15 Start: 9876, Stop: 10442, Start Num: 33

Candidate Starts for Miniwave_15:

(Start: 33 @9876 has 132 MA's), (67, 10014), (83, 10104), (86, 10113), (109, 10233), (114, 10260), (132, 10326),

Gene: Misfit_14 Start: 9230, Stop: 9796, Start Num: 33

Candidate Starts for Misfit_14:

(Start: 33 @9230 has 132 MA's), (67, 9368), (83, 9458), (86, 9467), (109, 9587), (114, 9614), (132, 9680),

Gene: Moldemort_15 Start: 8888, Stop: 9454, Start Num: 33

Candidate Starts for Moldemort_15:

(Start: 33 @8888 has 132 MA's), (67, 9026), (83, 9116), (86, 9125), (109, 9245), (114, 9272), (132, 9338),

Gene: MollyToe_15 Start: 9848, Stop: 10414, Start Num: 33

Candidate Starts for MollyToe_15:

(Start: 33 @9848 has 132 MA's), (67, 9986), (83, 10076), (86, 10085), (109, 10205), (114, 10232), (132, 10298),

Gene: MooMoo_7 Start: 5220, Stop: 5819, Start Num: 28

Candidate Starts for MooMoo_7:

(Start: 28 @5220 has 65 MA's), (37, 5244), (54, 5319), (125, 5628), (127, 5640), (136, 5679), (159, 5769), (165, 5805),

Gene: Mori_40 Start: 21165, Stop: 21770, Start Num: 28

Candidate Starts for Mori_40:

(Start: 28 @21165 has 65 MA's), (Start: 34 @21180 has 2 MA's), (51, 21243), (61, 21291), (63, 21300), (67, 21318), (86, 21408), (90, 21423), (109, 21525), (110, 21531), (120, 21573), (122, 21579), (125, 21588), (126, 21591), (127, 21600), (144, 21663), (159, 21720), (160, 21729), (165, 21756),

Gene: Morrey_13 Start: 7625, Stop: 8140, Start Num: 21

Candidate Starts for Morrey_13:

(Start: 21 @7625 has 9 MA's),

Gene: Morrissey_7 Start: 6029, Stop: 6574, Start Num: 23

Candidate Starts for Morrissey_7:

(Start: 23 @6029 has 1 MA's), (54, 6131), (65, 6176), (69, 6194), (70, 6212), (109, 6368), (110, 6374), (127, 6440), (137, 6482), (156, 6557),

Gene: Mosby_14 Start: 9186, Stop: 9752, Start Num: 33

Candidate Starts for Mosby_14:

(Start: 33 @9186 has 132 MA's), (67, 9324), (83, 9414), (86, 9423), (109, 9543), (114, 9570), (132, 9636),

Gene: Murai_41 Start: 21355, Stop: 21960, Start Num: 28

Candidate Starts for Murai_41:

(Start: 28 @21355 has 65 MA's), (51, 21433), (61, 21481), (63, 21490), (67, 21508), (86, 21598), (90, 21613), (109, 21715), (110, 21721), (122, 21769), (125, 21778), (126, 21781), (127, 21790), (144, 21853), (159, 21910), (160, 21919), (165, 21946),

Gene: Murica_13 Start: 9142, Stop: 9708, Start Num: 33

Candidate Starts for Murica_13:

(Start: 33 @9142 has 132 MA's), (67, 9280), (83, 9370), (86, 9379), (109, 9499), (114, 9526), (132, 9592),

Gene: Murphy_14 Start: 8605, Stop: 9171, Start Num: 33

Candidate Starts for Murphy_14:

(Start: 33 @8605 has 132 MA's), (67, 8743), (83, 8833), (86, 8842), (109, 8962), (114, 8989), (132, 9055),

Gene: Myrale_15 Start: 9549, Stop: 10115, Start Num: 33

Candidate Starts for Myrale_15:

(Start: 33 @9549 has 132 MA's), (67, 9687), (83, 9777), (86, 9786), (109, 9906), (114, 9933), (132, 9999),

Gene: Nala_14 Start: 9186, Stop: 9752, Start Num: 33

Candidate Starts for Nala_14:

(Start: 33 @9186 has 132 MA's), (67, 9324), (83, 9414), (86, 9423), (109, 9543), (114, 9570), (132, 9636),

Gene: Nekros_23 Start: 15994, Stop: 16563, Start Num: 28

Candidate Starts for Nekros_23:

(Start: 26 @15991 has 6 MA's), (Start: 28 @15994 has 65 MA's), (64, 16135), (86, 16237), (98, 16279), (117, 16381), (119, 16390), (125, 16408), (134, 16444), (140, 16465), (145, 16483), (154, 16516), (156, 16528), (162, 16549),

Gene: NelitzaMV_15 Start: 9748, Stop: 10314, Start Num: 33

Candidate Starts for NelitzaMV_15:

(Start: 33 @9748 has 132 MA's), (67, 9886), (83, 9976), (86, 9985), (109, 10105), (114, 10132), (132, 10198),

Gene: Nенаe_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for Nенаe_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (58, 6042), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Nibley_18 Start: 12676, Stop: 13245, Start Num: 28

Candidate Starts for Nibley_18:

(Start: 26 @12673 has 6 MA's), (Start: 28 @12676 has 65 MA's), (64, 12817), (86, 12919), (98, 12961), (117, 13063), (119, 13072), (125, 13090), (134, 13126), (140, 13147), (145, 13165), (154, 13198), (156, 13210), (162, 13231),

Gene: NiebruSaylor_40 Start: 21166, Stop: 21771, Start Num: 28

Candidate Starts for NiebruSaylor_40:

(Start: 28 @21166 has 65 MA's), (Start: 34 @21181 has 2 MA's), (51, 21244), (61, 21292), (63, 21301), (67, 21319), (86, 21409), (90, 21424), (109, 21526), (110, 21532), (120, 21574), (122, 21580), (125,

21589), (126, 21592), (127, 21601), (144, 21664), (159, 21721), (160, 21730), (165, 21757),

Gene: NihilNomen_24 Start: 16050, Stop: 16619, Start Num: 28

Candidate Starts for NihilNomen_24:

(Start: 28 @16050 has 65 MA's), (63, 16188), (78, 16257), (98, 16335), (112, 16416), (119, 16446), (124, 16461), (125, 16464), (134, 16500), (136, 16506), (145, 16539), (162, 16605),

Gene: Nimrod_14 Start: 9385, Stop: 9951, Start Num: 33

Candidate Starts for Nimrod_14:

(Start: 33 @9385 has 132 MA's), (67, 9523), (83, 9613), (86, 9622), (109, 9742), (114, 9769), (132, 9835),

Gene: NoSleep_15 Start: 8885, Stop: 9451, Start Num: 33

Candidate Starts for NoSleep_15:

(Start: 33 @8885 has 132 MA's), (67, 9023), (83, 9113), (86, 9122), (109, 9242), (114, 9269), (132, 9335),

Gene: NoSwimming_10 Start: 8529, Stop: 9050, Start Num: 25

Candidate Starts for NoSwimming_10:

(Start: 25 @8529 has 2 MA's), (Start: 35 @8553 has 1 MA's), (73, 8718), (98, 8811), (109, 8853), (139, 8955), (142, 8970),

Gene: NonchalantPear_14 Start: 8838, Stop: 9404, Start Num: 33

Candidate Starts for NonchalantPear_14:

(Start: 33 @8838 has 132 MA's), (67, 8976), (83, 9066), (86, 9075), (109, 9195), (114, 9222), (132, 9288),

Gene: Odette_24 Start: 15531, Stop: 16100, Start Num: 28

Candidate Starts for Odette_24:

(Start: 28 @15531 has 65 MA's), (63, 15669), (98, 15816), (112, 15897), (119, 15927), (124, 15942), (125, 15945), (134, 15981), (136, 15987), (145, 16020), (162, 16086),

Gene: Omega_25 Start: 17674, Stop: 18243, Start Num: 28

Candidate Starts for Omega_25:

(Start: 26 @17671 has 6 MA's), (Start: 28 @17674 has 65 MA's), (64, 17815), (86, 17917), (98, 17959), (117, 18061), (119, 18070), (125, 18088), (140, 18145), (145, 18163), (154, 18196), (162, 18229),

Gene: Optimus_23 Start: 15628, Stop: 16197, Start Num: 28

Candidate Starts for Optimus_23:

(Start: 28 @15628 has 65 MA's), (98, 15913), (112, 15994), (119, 16024), (124, 16039), (125, 16042), (134, 16078), (136, 16084), (145, 16117), (162, 16183),

Gene: OrionPax_15 Start: 8888, Stop: 9454, Start Num: 33

Candidate Starts for OrionPax_15:

(Start: 33 @8888 has 132 MA's), (67, 9026), (83, 9116), (86, 9125), (109, 9245), (114, 9272), (132, 9338),

Gene: PaddyBaddy_15 Start: 8898, Stop: 9464, Start Num: 33

Candidate Starts for PaddyBaddy_15:

(Start: 33 @8898 has 132 MA's), (67, 9036), (83, 9126), (86, 9135), (109, 9255), (114, 9282), (132, 9348),

Gene: PaintedDog_8 Start: 6534, Stop: 7079, Start Num: 29

Candidate Starts for PaintedDog_8:

(4, 6348), (Start: 29 @6534 has 14 MA's), (Start: 42 @6570 has 1 MA's), (61, 6657), (63, 6666), (72, 6711), (79, 6744), (110, 6870), (159, 7044), (164, 7065),

Gene: Palpatine_14 Start: 9183, Stop: 9749, Start Num: 33

Candidate Starts for Palpatine_14:

(Start: 33 @9183 has 132 MA's), (67, 9321), (83, 9411), (86, 9420), (109, 9540), (114, 9567), (132, 9633),

Gene: Panchino_8 Start: 5973, Stop: 6458, Start Num: 47

Candidate Starts for Panchino_8:

(9, 5883), (12, 5895), (Start: 47 @5973 has 46 MA's), (57, 6012), (58, 6018), (66, 6060), (72, 6090), (88, 6159), (97, 6192), (110, 6249), (116, 6270), (122, 6291), (144, 6366), (149, 6384), (153, 6399), (163, 6441),

Gene: Paperbeatsrock_16 Start: 10120, Stop: 10686, Start Num: 33

Candidate Starts for Paperbeatsrock_16:

(Start: 33 @10120 has 132 MA's), (67, 10258), (83, 10348), (86, 10357), (109, 10477), (114, 10504), (132, 10570),

Gene: Parmesanjohn_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Parmesanjohn_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Pat3_14 Start: 8388, Stop: 8954, Start Num: 33

Candidate Starts for Pat3_14:

(Start: 33 @8388 has 132 MA's), (67, 8526), (83, 8616), (86, 8625), (109, 8745), (114, 8772), (132, 8838),

Gene: Petra64142_15 Start: 9601, Stop: 10167, Start Num: 33

Candidate Starts for Petra64142_15:

(Start: 33 @9601 has 132 MA's), (67, 9739), (83, 9829), (86, 9838), (109, 9958), (114, 9985), (132, 10051),

Gene: Phaja_14 Start: 9338, Stop: 9904, Start Num: 33

Candidate Starts for Phaja_14:

(Start: 33 @9338 has 132 MA's), (67, 9476), (83, 9566), (86, 9575), (109, 9695), (114, 9722), (132, 9788),

Gene: PhancyPhin_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for PhancyPhin_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Pharsalus_15 Start: 9920, Stop: 10486, Start Num: 33

Candidate Starts for Pharsalus_15:

(Start: 33 @9920 has 132 MA's), (67, 10058), (83, 10148), (86, 10157), (109, 10277), (114, 10304), (132, 10370),

Gene: PhatBacter_14 Start: 9186, Stop: 9752, Start Num: 33

Candidate Starts for PhatBacter_14:

(Start: 33 @9186 has 132 MA's), (67, 9324), (83, 9414), (86, 9423), (109, 9543), (114, 9570), (132, 9636),

Gene: Phaux_13 Start: 9186, Stop: 9752, Start Num: 33

Candidate Starts for Phaux_13:

(Start: 33 @9186 has 132 MA's), (67, 9324), (83, 9414), (86, 9423), (109, 9543), (114, 9570), (132, 9636),

Gene: Philonius_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Philonius_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Phloss_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Phloss_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Phoebus_25 Start: 16275, Stop: 16844, Start Num: 28

Candidate Starts for Phoebus_25:

(Start: 28 @16275 has 65 MA's), (98, 16560), (112, 16641), (119, 16671), (124, 16686), (125, 16689), (134, 16725), (136, 16731), (145, 16764), (162, 16830),

Gene: Phrann_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for Phrann_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Phrux_14 Start: 8884, Stop: 9450, Start Num: 33

Candidate Starts for Phrux_14:

(Start: 33 @8884 has 132 MA's), (67, 9022), (83, 9112), (86, 9121), (109, 9241), (114, 9268), (132, 9334),

Gene: Pigu_8 Start: 5996, Stop: 6514, Start Num: 19

Candidate Starts for Pigu_8:

(Start: 19 @5996 has 2 MA's), (Start: 21 @5999 has 9 MA's), (30, 6014), (39, 6038), (52, 6095), (67, 6164), (91, 6263), (108, 6317), (109, 6323), (134, 6410), (142, 6440),

Gene: Pipsqueaks_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Pipsqueaks_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Policronamos_14 Start: 9186, Stop: 9752, Start Num: 33

Candidate Starts for Policronamos_14:

(Start: 33 @9186 has 132 MA's), (67, 9324), (83, 9414), (86, 9423), (109, 9543), (114, 9570), (132, 9636),

Gene: Porcelain_23 Start: 13748, Stop: 14317, Start Num: 28

Candidate Starts for Porcelain_23:

(Start: 26 @13745 has 6 MA's), (Start: 28 @13748 has 65 MA's), (64, 13889), (86, 13991), (98, 14033), (117, 14135), (119, 14144), (125, 14162), (134, 14198), (140, 14219), (145, 14237), (154, 14270), (156, 14282), (162, 14303),

Gene: Porky_13 Start: 8458, Stop: 9024, Start Num: 33

Candidate Starts for Porky_13:

(Start: 33 @8458 has 132 MA's), (67, 8596), (83, 8686), (86, 8695), (109, 8815), (114, 8842), (132, 8908),

Gene: Pound_25 Start: 16367, Stop: 16936, Start Num: 28

Candidate Starts for Pound_25:

(Start: 28 @16367 has 65 MA's), (98, 16652), (112, 16733), (119, 16763), (124, 16778), (125, 16781), (134, 16817), (136, 16823), (145, 16856), (162, 16922),

Gene: PrairieDogTown_9 Start: 7625, Stop: 8140, Start Num: 21

Candidate Starts for PrairieDogTown_9:

(Start: 21 @7625 has 9 MA's),

Gene: Ptowny_14 Start: 8525, Stop: 9091, Start Num: 33

Candidate Starts for Ptowny_14:

(Start: 33 @8525 has 132 MA's), (67, 8663), (83, 8753), (86, 8762), (109, 8882), (114, 8909), (132, 8975),

Gene: Pumpkin_15 Start: 8701, Stop: 9267, Start Num: 33

Candidate Starts for Pumpkin_15:

(Start: 33 @8701 has 132 MA's), (67, 8839), (83, 8929), (86, 8938), (109, 9058), (114, 9085), (132, 9151),

Gene: Puppies_7 Start: 5969, Stop: 6499, Start Num: 24

Candidate Starts for Puppies_7:

(Start: 24 @5969 has 8 MA's), (48, 6032), (52, 6044), (54, 6056), (65, 6101), (77, 6164), (80, 6182), (86, 6203), (108, 6284), (109, 6290), (144, 6431),

Gene: Purgamenstris_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for Purgamenstris_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (58, 6042), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Quallification_16 Start: 9885, Stop: 10451, Start Num: 33

Candidate Starts for Quallification_16:

(Start: 33 @9885 has 132 MA's), (67, 10023), (83, 10113), (86, 10122), (109, 10242), (114, 10269), (132, 10335),

Gene: QueenHazel_9 Start: 6990, Stop: 7535, Start Num: 29

Candidate Starts for QueenHazel_9:

(4, 6804), (Start: 29 @6990 has 14 MA's), (Start: 42 @7026 has 1 MA's), (61, 7113), (63, 7122), (72, 7167), (79, 7200), (110, 7326), (159, 7500), (164, 7521),

Gene: Rakim_16 Start: 9792, Stop: 10358, Start Num: 33

Candidate Starts for Rakim_16:

(Start: 33 @9792 has 132 MA's), (67, 9930), (83, 10020), (86, 10029), (109, 10149), (114, 10176), (132, 10242),

Gene: Raymond7_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for Raymond7_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Rearden_20 Start: 12733, Stop: 13302, Start Num: 28

Candidate Starts for Rearden_20:

(Start: 26 @12730 has 6 MA's), (Start: 28 @12733 has 65 MA's), (64, 12874), (86, 12976), (98, 13018), (117, 13120), (119, 13129), (125, 13147), (134, 13183), (140, 13204), (145, 13222), (154, 13255), (156, 13267), (162, 13288),

Gene: Rebel_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for Rebel_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (58, 6042), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Redi_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for Redi_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (58, 6042), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Redno2_24 Start: 15759, Stop: 16328, Start Num: 28

Candidate Starts for Redno2_24:

(Start: 28 @15759 has 65 MA's), (98, 16044), (112, 16125), (119, 16155), (124, 16170), (125, 16173), (134, 16209), (136, 16215), (145, 16248), (162, 16314),

Gene: Reyja_9 Start: 6424, Stop: 6957, Start Num: 31

Candidate Starts for Reyja_9:

(Start: 31 @6424 has 7 MA's), (61, 6544), (110, 6751), (152, 6922), (158, 6946),

Gene: Rimmer_14 Start: 9245, Stop: 9811, Start Num: 33

Candidate Starts for Rimmer_14:

(Start: 33 @9245 has 132 MA's), (67, 9383), (83, 9473), (86, 9482), (109, 9602), (114, 9629), (132, 9695),

Gene: RiverMonster_14 Start: 8898, Stop: 9464, Start Num: 33

Candidate Starts for RiverMonster_14:

(Start: 33 @8898 has 132 MA's), (67, 9036), (83, 9126), (86, 9135), (109, 9255), (114, 9282), (132, 9348),

Gene: Rooter_8 Start: 6027, Stop: 6545, Start Num: 19

Candidate Starts for Rooter_8:

(10, 5985), (11, 5988), (Start: 19 @6027 has 2 MA's), (Start: 21 @6030 has 9 MA's), (Start: 35 @6060 has 1 MA's), (39, 6069), (40, 6072), (41, 6078), (66, 6192), (67, 6195), (70, 6219), (91, 6294), (109, 6354), (117, 6378), (125, 6405), (149, 6498),

Gene: Rubeelu_8 Start: 5970, Stop: 6461, Start Num: 47

Candidate Starts for Rubeelu_8:

(9, 5859), (12, 5871), (Start: 47 @5970 has 46 MA's), (57, 6009), (66, 6057), (72, 6087), (80, 6129), (88, 6156), (97, 6189), (110, 6246), (116, 6273), (122, 6294), (124, 6300), (144, 6369), (153, 6402),

(163, 6444),

Gene: Ryadel_45 Start: 22639, Stop: 23244, Start Num: 28

Candidate Starts for Ryadel_45:

(Start: 28 @22639 has 65 MA's), (51, 22717), (61, 22765), (63, 22774), (67, 22792), (86, 22882), (90, 22897), (104, 22948), (109, 22999), (110, 23005), (122, 23053), (125, 23062), (126, 23065), (127, 23074), (144, 23137), (159, 23194), (160, 23203), (165, 23230),

Gene: Saints25_15 Start: 8807, Stop: 9373, Start Num: 33

Candidate Starts for Saints25_15:

(Start: 33 @8807 has 132 MA's), (67, 8945), (83, 9035), (86, 9044), (109, 9164), (114, 9191), (132, 9257),

Gene: Santhid_8 Start: 6292, Stop: 6825, Start Num: 31

Candidate Starts for Santhid_8:

(Start: 31 @6292 has 7 MA's), (61, 6412), (75, 6472), (110, 6619), (152, 6790), (158, 6814),

Gene: Sapo_6 Start: 5442, Stop: 6047, Start Num: 22

Candidate Starts for Sapo_6:

(Start: 22 @5442 has 4 MA's), (48, 5523), (52, 5535), (63, 5589), (67, 5604), (81, 5679), (96, 5733), (103, 5754), (108, 5802), (116, 5841),

Gene: Sarge_8 Start: 6394, Stop: 6912, Start Num: 19

Candidate Starts for Sarge_8:

(Start: 19 @6394 has 2 MA's), (Start: 21 @6397 has 9 MA's), (Start: 35 @6427 has 1 MA's), (39, 6436), (40, 6439), (41, 6445), (66, 6559), (67, 6562), (70, 6586), (108, 6715), (117, 6745), (125, 6772), (152, 6877),

Gene: Sassay_14 Start: 9186, Stop: 9752, Start Num: 33

Candidate Starts for Sassay_14:

(Start: 33 @9186 has 132 MA's), (67, 9324), (83, 9414), (86, 9423), (109, 9543), (114, 9570), (132, 9636),

Gene: Sbash_8 Start: 6564, Stop: 7112, Start Num: 29

Candidate Starts for Sbash_8:

(Start: 29 @6564 has 14 MA's), (Start: 42 @6600 has 1 MA's), (53, 6651), (61, 6687), (63, 6696), (67, 6714), (72, 6741), (79, 6774), (85, 6801), (88, 6810), (122, 6948), (123, 6951), (138, 6999), (152, 7050), (159, 7077), (164, 7098),

Gene: Schatzie_23 Start: 15300, Stop: 15869, Start Num: 28

Candidate Starts for Schatzie_23:

(Start: 28 @15300 has 65 MA's), (63, 15438), (78, 15507), (98, 15585), (112, 15666), (119, 15696), (124, 15711), (125, 15714), (134, 15750), (136, 15756), (145, 15789), (162, 15855),

Gene: Schmidt_10 Start: 7341, Stop: 7862, Start Num: 26

Candidate Starts for Schmidt_10:

(13, 7305), (Start: 26 @7341 has 6 MA's), (Start: 45 @7392 has 2 MA's), (49, 7416), (52, 7422), (61, 7467), (68, 7494), (77, 7542), (79, 7551), (80, 7560), (102, 7632), (108, 7662), (118, 7704), (123, 7719), (139, 7782), (157, 7854),

Gene: Schnauzer_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Schnauzer_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: SchoolBus_41 Start: 21580, Stop: 22185, Start Num: 28

Candidate Starts for SchoolBus_41:

(Start: 28 @21580 has 65 MA's), (Start: 34 @21595 has 2 MA's), (51, 21658), (61, 21706), (63, 21715), (67, 21733), (86, 21823), (90, 21838), (109, 21940), (110, 21946), (120, 21988), (122, 21994), (125, 22003), (126, 22006), (127, 22015), (144, 22078), (159, 22135), (160, 22144), (165, 22171),

Gene: Schuy_42 Start: 21513, Stop: 22118, Start Num: 28

Candidate Starts for Schuy_42:

(Start: 28 @21513 has 65 MA's), (Start: 34 @21528 has 2 MA's), (51, 21591), (61, 21639), (63, 21648), (67, 21666), (86, 21756), (90, 21771), (109, 21873), (110, 21879), (120, 21921), (122, 21927), (125, 21936), (126, 21939), (127, 21948), (144, 22011), (159, 22068), (160, 22077), (165, 22104),

Gene: Scitech_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Scitech_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Scotia_10 Start: 8535, Stop: 9056, Start Num: 25

Candidate Starts for Scotia_10:

(Start: 25 @8535 has 2 MA's), (Start: 35 @8559 has 1 MA's), (73, 8724), (109, 8859), (139, 8961), (142, 8976),

Gene: Shaboozey_17 Start: 12159, Stop: 12728, Start Num: 28

Candidate Starts for Shaboozey_17:

(Start: 26 @12156 has 6 MA's), (Start: 28 @12159 has 65 MA's), (64, 12300), (86, 12402), (98, 12444), (117, 12546), (119, 12555), (125, 12573), (134, 12609), (140, 12630), (145, 12648), (154, 12681), (156, 12693), (162, 12714),

Gene: ShamWow_15 Start: 9679, Stop: 10245, Start Num: 33

Candidate Starts for ShamWow_15:

(Start: 33 @9679 has 132 MA's), (67, 9817), (83, 9907), (86, 9916), (109, 10036), (114, 10063), (132, 10129),

Gene: ShereKhan_16 Start: 10126, Stop: 10692, Start Num: 33

Candidate Starts for ShereKhan_16:

(Start: 33 @10126 has 132 MA's), (67, 10264), (83, 10354), (86, 10363), (109, 10483), (114, 10510), (132, 10576),

Gene: Shida_41 Start: 21420, Stop: 22025, Start Num: 28

Candidate Starts for Shida_41:

(Start: 28 @21420 has 65 MA's), (51, 21498), (61, 21546), (63, 21555), (67, 21573), (86, 21663), (90, 21678), (109, 21780), (110, 21786), (120, 21828), (122, 21834), (125, 21843), (126, 21846), (127, 21855), (144, 21918), (159, 21975), (160, 21984), (165, 22011),

Gene: Shoya_7 Start: 6030, Stop: 6548, Start Num: 19

Candidate Starts for Shoya_7:

(11, 5991), (16, 6009), (Start: 19 @6030 has 2 MA's), (Start: 21 @6033 has 9 MA's), (Start: 35 @6063 has 1 MA's), (39, 6072), (40, 6075), (41, 6081), (66, 6195), (67, 6198), (70, 6222), (91, 6297), (109,

6357), (117, 6381), (125, 6408), (139, 6459), (149, 6501),

Gene: ShrimpFriedEgg_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for ShrimpFriedEgg_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (58, 6042), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Shweta_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for Shweta_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Silvafighter_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Silvafighter_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Silvy_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Silvy_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Simpliphy_15 Start: 8888, Stop: 9454, Start Num: 33

Candidate Starts for Simpliphy_15:

(Start: 33 @8888 has 132 MA's), (67, 9026), (83, 9116), (86, 9125), (109, 9245), (114, 9272), (132, 9338),

Gene: SirDuracell_14 Start: 8345, Stop: 8911, Start Num: 33

Candidate Starts for SirDuracell_14:

(Start: 33 @8345 has 132 MA's), (67, 8483), (83, 8573), (86, 8582), (109, 8702), (114, 8729), (132, 8795),

Gene: SkinnyPete_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for SkinnyPete_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (58, 6042), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Smooch_43 Start: 22708, Stop: 23313, Start Num: 28

Candidate Starts for Smooch_43:

(Start: 28 @22708 has 65 MA's), (Start: 34 @22723 has 2 MA's), (51, 22786), (61, 22834), (63, 22843), (86, 22951), (90, 22966), (109, 23068), (110, 23074), (120, 23116), (122, 23122), (125, 23131), (126, 23134), (127, 23143), (144, 23206), (159, 23263), (160, 23272), (165, 23299),

Gene: Smurph_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Smurph_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Snekmaggedon_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for Snekmaggedon_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (58, 6042), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: SophKB_15 Start: 9678, Stop: 10244, Start Num: 33

Candidate Starts for SophKB_15:

(Start: 33 @9678 has 132 MA's), (67, 9816), (83, 9906), (86, 9915), (109, 10035), (114, 10062), (132, 10128),

Gene: Sotrice96_15 Start: 9634, Stop: 10200, Start Num: 33

Candidate Starts for Sotrice96_15:

(Start: 33 @9634 has 132 MA's), (67, 9772), (83, 9862), (86, 9871), (109, 9991), (114, 10018), (132, 10084),

Gene: Spinach_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for Spinach_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (58, 6042), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Splinter_12 Start: 8930, Stop: 9409, Start Num: 45

Candidate Starts for Splinter_12:

(Start: 29 @8885 has 14 MA's), (Start: 45 @8930 has 2 MA's), (61, 9005), (73, 9059), (79, 9089), (87, 9119), (106, 9176), (108, 9200), (119, 9245), (121, 9251), (122, 9254), (139, 9320), (143, 9338), (148, 9356), (157, 9395),

Gene: SpongeBob_8 Start: 5997, Stop: 6482, Start Num: 47

Candidate Starts for SpongeBob_8:

(9, 5883), (12, 5895), (Start: 47 @5997 has 46 MA's), (57, 6036), (58, 6042), (66, 6084), (72, 6114), (88, 6183), (97, 6216), (110, 6273), (116, 6294), (122, 6315), (144, 6390), (149, 6408), (153, 6423), (163, 6465),

Gene: Squint_22 Start: 13875, Stop: 14444, Start Num: 28

Candidate Starts for Squint_22:

(Start: 26 @13872 has 6 MA's), (Start: 28 @13875 has 65 MA's), (64, 14016), (86, 14118), (98, 14160), (117, 14262), (119, 14271), (125, 14289), (134, 14325), (140, 14346), (145, 14364), (154, 14397), (156, 14409), (162, 14430),

Gene: Stank_16 Start: 9133, Stop: 9699, Start Num: 33

Candidate Starts for Stank_16:

(Start: 33 @9133 has 132 MA's), (67, 9271), (83, 9361), (86, 9370), (109, 9490), (114, 9517), (132, 9583),

Gene: Stark_15 Start: 8901, Stop: 9467, Start Num: 33

Candidate Starts for Stark_15:

(Start: 33 @8901 has 132 MA's), (67, 9039), (83, 9129), (86, 9138), (109, 9258), (114, 9285), (132, 9351),

Gene: StellaBean_15 Start: 9678, Stop: 10244, Start Num: 33

Candidate Starts for StellaBean_15:

(Start: 33 @9678 has 132 MA's), (67, 9816), (83, 9906), (86, 9915), (109, 10035), (114, 10062), (132, 10128),

Gene: StolenFromERC_16 Start: 9133, Stop: 9699, Start Num: 33

Candidate Starts for StolenFromERC_16:

(Start: 33 @9133 has 132 MA's), (67, 9271), (83, 9361), (86, 9370), (109, 9490), (114, 9517), (132, 9583),

Gene: StormChicken_15 Start: 9851, Stop: 10417, Start Num: 33

Candidate Starts for StormChicken_15:

(Start: 33 @9851 has 132 MA's), (67, 9989), (83, 10079), (86, 10088), (109, 10208), (114, 10235), (132, 10301),

Gene: Stuck_8 Start: 6576, Stop: 7124, Start Num: 29

Candidate Starts for Stuck_8:

(1, 6279), (2, 6318), (5, 6453), (Start: 29 @6576 has 14 MA's), (Start: 42 @6612 has 1 MA's), (53, 6663), (61, 6699), (63, 6708), (67, 6726), (72, 6753), (77, 6777), (78, 6780), (79, 6786), (88, 6822), (122, 6960), (123, 6963), (152, 7062), (159, 7089),

Gene: Superphikiman_23 Start: 13929, Stop: 14498, Start Num: 28

Candidate Starts for Superphikiman_23:

(Start: 26 @13926 has 6 MA's), (Start: 28 @13929 has 65 MA's), (64, 14070), (86, 14172), (98, 14214), (117, 14316), (119, 14325), (125, 14343), (134, 14379), (140, 14400), (145, 14418), (154, 14451), (156, 14463), (162, 14484),

Gene: TBrady12_16 Start: 9130, Stop: 9696, Start Num: 33

Candidate Starts for TBrady12_16:

(Start: 33 @9130 has 132 MA's), (67, 9268), (83, 9358), (86, 9367), (109, 9487), (114, 9514), (132, 9580),

Gene: TZGordon_14 Start: 9027, Stop: 9551, Start Num: 29

Candidate Starts for TZGordon_14:

(Start: 29 @9027 has 14 MA's), (Start: 45 @9072 has 2 MA's), (61, 9147), (73, 9201), (79, 9231), (87, 9261), (106, 9318), (108, 9342), (119, 9387), (122, 9396), (139, 9462), (143, 9480), (148, 9498), (157, 9537),

Gene: Tapioca_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Tapioca_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Tarkin_16 Start: 10129, Stop: 10695, Start Num: 33

Candidate Starts for Tarkin_16:

(Start: 33 @10129 has 132 MA's), (67, 10267), (83, 10357), (86, 10366), (109, 10486), (114, 10513), (132, 10579),

Gene: Tarzan_8 Start: 6283, Stop: 6816, Start Num: 31

Candidate Starts for Tarzan_8:

(Start: 31 @6283 has 7 MA's), (57, 6379), (67, 6430), (69, 6436), (110, 6610), (158, 6805),

Gene: TeamEdward_15 Start: 9848, Stop: 10414, Start Num: 33

Candidate Starts for TeamEdward_15:

(Start: 33 @9848 has 132 MA's), (67, 9986), (83, 10076), (86, 10085), (109, 10205), (114, 10232), (132, 10298),

Gene: TeardropMSU_14 Start: 9586, Stop: 10152, Start Num: 33

Candidate Starts for TeardropMSU_14:

(Start: 33 @9586 has 132 MA's), (67, 9724), (83, 9814), (86, 9823), (109, 9943), (114, 9970), (132, 10036),

Gene: Teaspoon_14 Start: 8583, Stop: 9149, Start Num: 33

Candidate Starts for Teaspoon_14:

(Start: 33 @8583 has 132 MA's), (67, 8721), (83, 8811), (86, 8820), (109, 8940), (114, 8967), (132, 9033),

Gene: TelAviv_38 Start: 21574, Stop: 22179, Start Num: 28

Candidate Starts for TelAviv_38:

(Start: 28 @21574 has 65 MA's), (Start: 34 @21589 has 2 MA's), (51, 21652), (61, 21700), (63, 21709), (67, 21727), (86, 21817), (90, 21832), (109, 21934), (110, 21940), (120, 21982), (122, 21988), (125, 21997), (126, 22000), (127, 22009), (144, 22072), (159, 22129), (160, 22138), (165, 22165),

Gene: Terminus_14 Start: 9230, Stop: 9796, Start Num: 33

Candidate Starts for Terminus_14:

(Start: 33 @9230 has 132 MA's), (67, 9368), (83, 9458), (86, 9467), (109, 9587), (114, 9614), (132, 9680),

Gene: Tessdabest_7 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Tessdabest_7:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Thibault_21 Start: 15559, Stop: 16128, Start Num: 28

Candidate Starts for Thibault_21:

(Start: 28 @15559 has 65 MA's), (98, 15844), (112, 15925), (119, 15955), (124, 15970), (125, 15973), (134, 16009), (136, 16015), (145, 16048), (162, 16114),

Gene: Thimble_15 Start: 8635, Stop: 9201, Start Num: 33

Candidate Starts for Thimble_15:

(Start: 33 @8635 has 132 MA's), (67, 8773), (83, 8863), (86, 8872), (109, 8992), (114, 9019), (132, 9085),

Gene: ThreeRngTarjay_24 Start: 16125, Stop: 16694, Start Num: 28

Candidate Starts for ThreeRngTarjay_24:

(Start: 28 @16125 has 65 MA's), (98, 16410), (112, 16491), (119, 16521), (124, 16536), (125, 16539), (134, 16575), (136, 16581), (145, 16614), (162, 16680),

Gene: Thresher_15 Start: 9891, Stop: 10457, Start Num: 33

Candidate Starts for Thresher_15:

(Start: 33 @9891 has 132 MA's), (67, 10029), (83, 10119), (86, 10128), (109, 10248), (114, 10275), (132, 10341),

Gene: TinaLin_15 Start: 9599, Stop: 10123, Start Num: 29

Candidate Starts for TinaLin_15:

(Start: 29 @9599 has 14 MA's), (66, 9740), (73, 9773), (106, 9890), (108, 9914), (118, 9956), (122, 9968), (139, 10034), (143, 10052), (148, 10070), (157, 10109), (158, 10112),

Gene: Tomaszewski_14 Start: 9279, Stop: 9845, Start Num: 33

Candidate Starts for Tomaszewski_14:

(Start: 33 @9279 has 132 MA's), (67, 9417), (83, 9507), (86, 9516), (109, 9636), (114, 9663), (132, 9729),

Gene: Tortoise12_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Tortoise12_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Toto_15 Start: 9679, Stop: 10245, Start Num: 33

Candidate Starts for Toto_15:

(Start: 33 @9679 has 132 MA's), (67, 9817), (83, 9907), (86, 9916), (109, 10036), (114, 10063), (132, 10129),

Gene: Traaww1_13 Start: 9324, Stop: 9890, Start Num: 33

Candidate Starts for Traaww1_13:

(Start: 33 @9324 has 132 MA's), (67, 9462), (83, 9552), (86, 9561), (109, 9681), (114, 9708), (132, 9774),

Gene: Trine_7 Start: 5978, Stop: 6505, Start Num: 18

Candidate Starts for Trine_7:

(Start: 18 @5978 has 1 MA's), (Start: 24 @5984 has 8 MA's), (54, 6071), (59, 6089), (65, 6116), (69, 6134), (72, 6155), (86, 6218), (109, 6305), (127, 6371), (130, 6386), (158, 6494),

Gene: Tuco_15 Start: 9678, Stop: 10244, Start Num: 33

Candidate Starts for Tuco_15:

(Start: 33 @9678 has 132 MA's), (67, 9816), (83, 9906), (86, 9915), (109, 10035), (114, 10062), (132, 10128),

Gene: Ukulele_14 Start: 8901, Stop: 9467, Start Num: 33

Candidate Starts for Ukulele_14:

(Start: 33 @8901 has 132 MA's), (67, 9039), (83, 9129), (86, 9138), (109, 9258), (114, 9285), (132, 9351),

Gene: Upyo_7 Start: 5995, Stop: 6522, Start Num: 24

Candidate Starts for Upyo_7:

(Start: 24 @5995 has 8 MA's), (54, 6082), (59, 6100), (61, 6115), (63, 6124), (65, 6127), (69, 6145), (72, 6166), (84, 6226), (99, 6268),

Gene: Vagabond_41 Start: 21407, Stop: 22012, Start Num: 28

Candidate Starts for Vagabond_41:

(Start: 28 @21407 has 65 MA's), (Start: 34 @21422 has 2 MA's), (51, 21485), (61, 21533), (63, 21542), (67, 21560), (86, 21650), (90, 21665), (109, 21767), (110, 21773), (120, 21815), (122, 21821), (125, 21830), (126, 21833), (127, 21842), (144, 21905), (159, 21962), (160, 21971), (165, 21998),

Gene: Vendetta_12 Start: 8930, Stop: 9409, Start Num: 45

Candidate Starts for Vendetta_12:

(Start: 29 @8885 has 14 MA's), (Start: 45 @8930 has 2 MA's), (61, 9005), (73, 9059), (79, 9089), (87, 9119), (106, 9176), (108, 9200), (119, 9245), (121, 9251), (122, 9254), (139, 9320), (143, 9338), (148, 9356), (157, 9395),

Gene: Vorrps_40 Start: 21166, Stop: 21771, Start Num: 28

Candidate Starts for Vorrps_40:

(Start: 28 @21166 has 65 MA's), (Start: 34 @21181 has 2 MA's), (51, 21244), (61, 21292), (63, 21301), (67, 21319), (86, 21409), (90, 21424), (109, 21526), (110, 21532), (120, 21574), (122, 21580), (125, 21589), (126, 21592), (127, 21601), (144, 21664), (159, 21721), (160, 21730), (165, 21757),

Gene: Wanda_26 Start: 15568, Stop: 16137, Start Num: 28

Candidate Starts for Wanda_26:

(Start: 28 @15568 has 65 MA's), (63, 15706), (78, 15775), (98, 15853), (112, 15934), (119, 15964), (124, 15979), (125, 15982), (134, 16018), (136, 16024), (145, 16057), (162, 16123),

Gene: Widow_7 Start: 5960, Stop: 6490, Start Num: 24

Candidate Starts for Widow_7:

(Start: 24 @5960 has 8 MA's), (48, 6023), (52, 6035), (54, 6047), (65, 6092), (77, 6155), (80, 6173), (108, 6275), (109, 6281), (144, 6422),

Gene: Wiggin_16 Start: 9133, Stop: 9699, Start Num: 33

Candidate Starts for Wiggin_16:

(Start: 33 @9133 has 132 MA's), (67, 9271), (83, 9361), (86, 9370), (109, 9490), (114, 9517), (132, 9583),

Gene: Wildflower_41 Start: 21152, Stop: 21757, Start Num: 28

Candidate Starts for Wildflower_41:

(Start: 28 @21152 has 65 MA's), (Start: 34 @21167 has 2 MA's), (51, 21230), (61, 21278), (63, 21287), (67, 21305), (86, 21395), (90, 21410), (109, 21512), (110, 21518), (120, 21560), (122, 21566), (125, 21575), (126, 21578), (127, 21587), (144, 21650), (159, 21707), (160, 21716), (165, 21743),

Gene: Willez_14 Start: 9186, Stop: 9752, Start Num: 33

Candidate Starts for Willez_14:

(Start: 33 @9186 has 132 MA's), (67, 9324), (83, 9414), (86, 9423), (109, 9543), (114, 9570), (132, 9636),

Gene: Winget_42 Start: 21846, Stop: 22451, Start Num: 28

Candidate Starts for Winget_42:

(Start: 28 @21846 has 65 MA's), (Start: 34 @21861 has 2 MA's), (51, 21924), (61, 21972), (63, 21981), (67, 21999), (86, 22089), (90, 22104), (109, 22206), (110, 22212), (120, 22254), (122, 22260), (125, 22269), (126, 22272), (127, 22281), (144, 22344), (159, 22401), (160, 22410), (165, 22437),

Gene: Wogge42_40 Start: 21485, Stop: 22090, Start Num: 28

Candidate Starts for Wogge42_40:

(Start: 28 @21485 has 65 MA's), (Start: 34 @21500 has 2 MA's), (51, 21563), (61, 21611), (63, 21620), (67, 21638), (86, 21728), (90, 21743), (109, 21845), (110, 21851), (120, 21893), (122, 21899), (125, 21908), (126, 21911), (127, 21920), (144, 21983), (159, 22040), (160, 22049), (165, 22076),

Gene: Xandras_16 Start: 9133, Stop: 9699, Start Num: 33

Candidate Starts for Xandras_16:

(Start: 33 @9133 has 132 MA's), (67, 9271), (83, 9361), (86, 9370), (109, 9490), (114, 9517), (132, 9583),

Gene: Xeno_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Xeno_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Xerxes_8 Start: 5956, Stop: 6441, Start Num: 47

Candidate Starts for Xerxes_8:

(8, 5854), (9, 5860), (12, 5872), (Start: 47 @5956 has 46 MA's), (57, 5995), (66, 6043), (72, 6073), (80, 6115), (83, 6130), (88, 6142), (90, 6151), (97, 6175), (110, 6232), (116, 6253), (122, 6274), (144, 6349), (149, 6367), (153, 6382), (161, 6415), (163, 6424),

Gene: Xiaokay_22 Start: 15575, Stop: 16144, Start Num: 28

Candidate Starts for Xiaokay_22:

(Start: 28 @15575 has 65 MA's), (63, 15713), (98, 15860), (112, 15941), (119, 15971), (124, 15986), (125, 15989), (134, 16025), (136, 16031), (145, 16064), (162, 16130),

Gene: Xula_8 Start: 6619, Stop: 7164, Start Num: 29

Candidate Starts for Xula_8:

(4, 6433), (Start: 29 @6619 has 14 MA's), (Start: 42 @6655 has 1 MA's), (61, 6742), (63, 6751), (72, 6796), (79, 6829), (110, 6955), (159, 7129), (164, 7150),

Gene: YassJohnny_15 Start: 9678, Stop: 10244, Start Num: 33

Candidate Starts for YassJohnny_15:

(Start: 33 @9678 has 132 MA's), (67, 9816), (83, 9906), (86, 9915), (109, 10035), (114, 10062), (132, 10128),

Gene: Yeet_23 Start: 15301, Stop: 15870, Start Num: 28

Candidate Starts for Yeet_23:

(Start: 28 @15301 has 65 MA's), (63, 15439), (98, 15586), (112, 15667), (119, 15697), (124, 15712), (125, 15715), (134, 15751), (136, 15757), (145, 15790), (162, 15856),

Gene: Youngblood_14 Start: 9311, Stop: 9877, Start Num: 33

Candidate Starts for Youngblood_14:

(Start: 33 @9311 has 132 MA's), (67, 9449), (83, 9539), (86, 9548), (109, 9668), (114, 9695), (132, 9761),

Gene: YoyoKar_39 Start: 21130, Stop: 21735, Start Num: 28

Candidate Starts for YoyoKar_39:

(Start: 28 @21130 has 65 MA's), (Start: 34 @21145 has 2 MA's), (51, 21208), (61, 21256), (63, 21265), (67, 21283), (86, 21373), (90, 21388), (109, 21490), (110, 21496), (120, 21538), (122, 21544), (125, 21553), (126, 21556), (127, 21565), (144, 21628), (159, 21685), (160, 21694), (165, 21721),

Gene: YungJamal_44 Start: 21885, Stop: 22490, Start Num: 28

Candidate Starts for YungJamal_44:

(Start: 28 @21885 has 65 MA's), (Start: 34 @21900 has 2 MA's), (51, 21963), (61, 22011), (63, 22020), (67, 22038), (86, 22128), (90, 22143), (109, 22245), (110, 22251), (120, 22293), (122, 22299), (125, 22308), (126, 22311), (127, 22320), (144, 22383), (159, 22440), (160, 22449), (165, 22476),

Gene: Zakhe101_41 Start: 21296, Stop: 21901, Start Num: 28

Candidate Starts for Zakhe101_41:

(Start: 28 @21296 has 65 MA's), (Start: 34 @21311 has 2 MA's), (51, 21374), (61, 21422), (63, 21431), (67, 21449), (86, 21539), (90, 21554), (109, 21656), (110, 21662), (120, 21704), (122, 21710), (125,

21719), (126, 21722), (127, 21731), (144, 21794), (159, 21851), (160, 21860), (165, 21887),

Gene: Zebo_41 Start: 21580, Stop: 22185, Start Num: 28

Candidate Starts for Zebo_41:

(Start: 28 @21580 has 65 MA's), (Start: 34 @21595 has 2 MA's), (51, 21658), (61, 21706), (63, 21715), (67, 21733), (86, 21823), (90, 21838), (109, 21940), (110, 21946), (120, 21988), (122, 21994), (125, 22003), (126, 22006), (127, 22015), (144, 22078), (159, 22135), (160, 22144), (165, 22171),

Gene: Zelink_26 Start: 16153, Stop: 16722, Start Num: 28

Candidate Starts for Zelink_26:

(Start: 28 @16153 has 65 MA's), (63, 16291), (98, 16438), (112, 16519), (119, 16549), (124, 16564), (125, 16567), (134, 16603), (136, 16609), (145, 16642), (162, 16708),

Gene: xkcd_15 Start: 9338, Stop: 9904, Start Num: 33

Candidate Starts for xkcd_15:

(Start: 33 @9338 has 132 MA's), (67, 9476), (83, 9566), (86, 9575), (109, 9695), (114, 9722), (132, 9788),