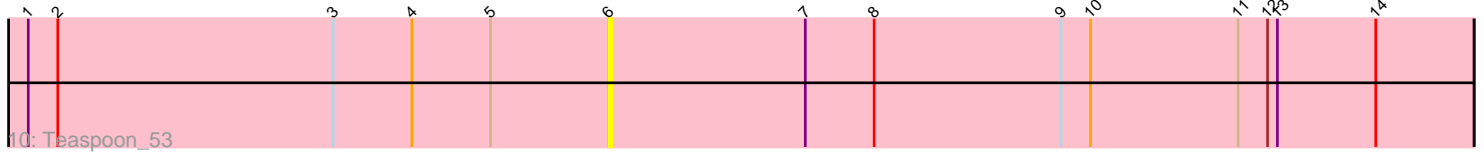
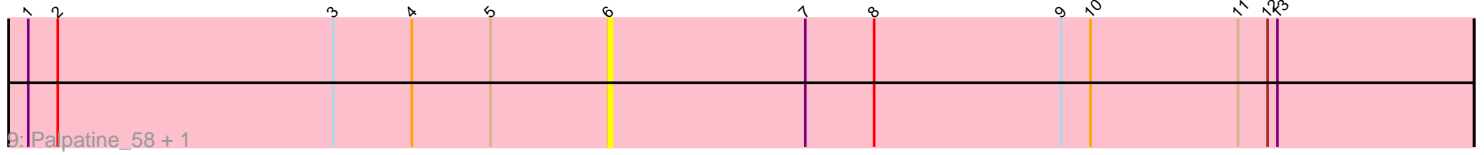
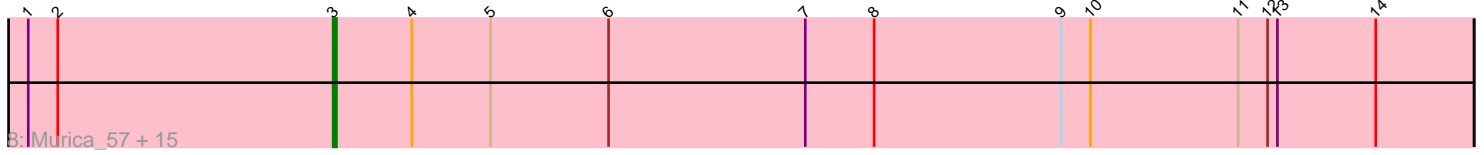
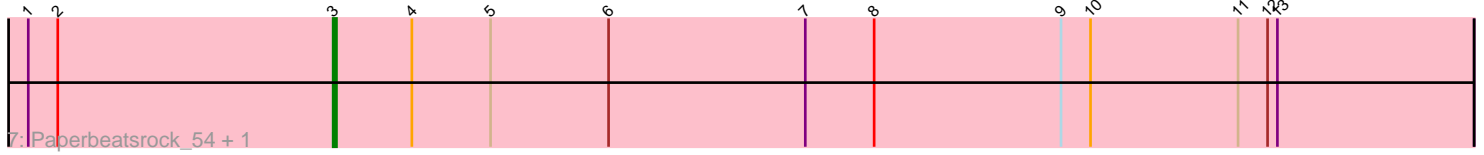
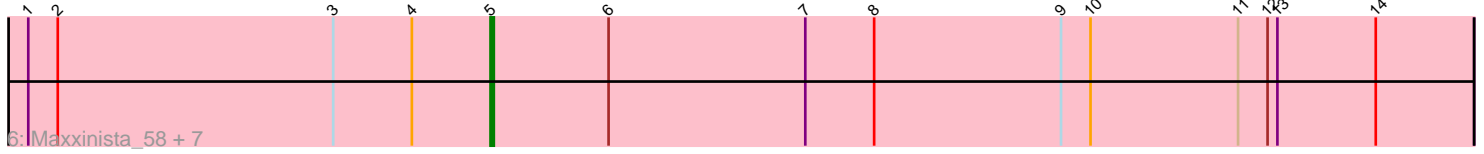
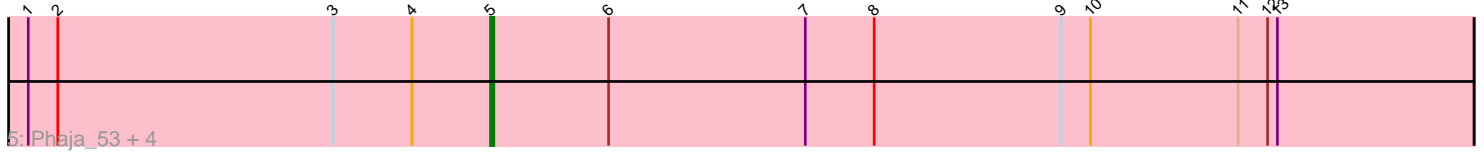
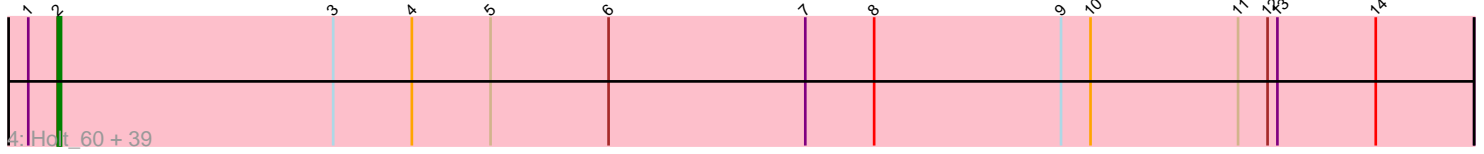
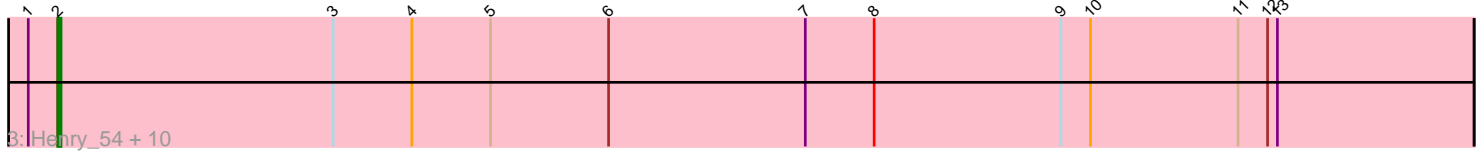
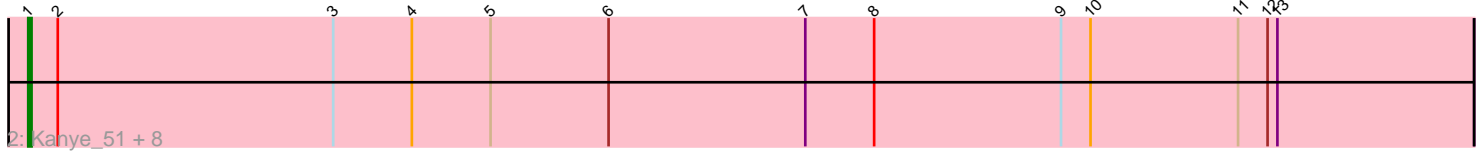
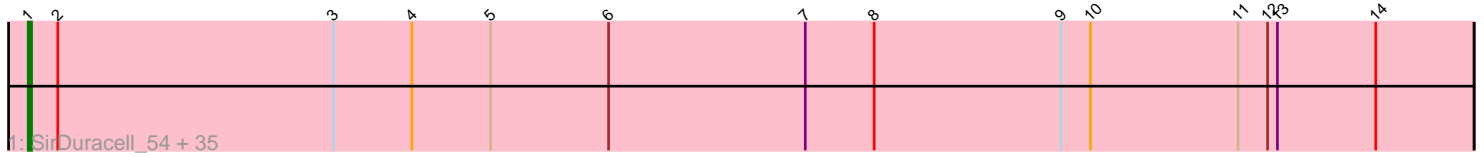


Pham 34502



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 34502 Report

This analysis was run 04/28/24 on database version 559.

Pham number 34502 has 130 members, 11 are drafts.

Phages represented in each track:

- Track 1 : SirDuracell_54, TeardropMSU_51, GooberAzure_58, Lilpickle_55, Cookies_52, BaboJay_51, Elph10_55, PhatBacter_58, AmericanBeauty_60, Contagion_52, JeTaim_56, Nimrod_58, Phaux_57, Porky_54, xkcd_59, Pat3_53, Bruin_51, GoldenSpark_58, Buck_56, Balomaji_54, RiverMonster_56, Stark_56, Hoonter_58, Harella_55, Nala_56, Myrale_55, Mosby_51, Misfit_57, Ukulele_52, Manda_55, ChosenOne_56, Rimmer_56, Elite2014_55, Goku_53, Czystczon1_56, Cactus_57
- Track 2 : Kanye_51, Gator_53, Tarkin_54, BadStone_53, Policronamos_60, Pharsalus_53, Miniwave_52, Filch_56, SophKB_52
- Track 3 : Henry_54, Dusk_53, Lilac_58, DrDrey_55, Tuco_56, Simpliphy_54, OrionPax_54, Command613_57, 244_56, Tomaszewski_51, NelitzaMV_52
- Track 4 : Holt_60, ABCat_53, Bask21_56, Wiggin_57, Argent26_58, Xandras_55, Goldilocks_57, StolenFromERC_58, ChotaBhai_55, Toto_54, Murphy_57, MadamMonkfish_55, Stank_59, Gemini_59, Saints25_56, Dumbo_55, Phrux_53, ShamWow_55, HufflyPuff_57, Traaww1_51, Adnama_59, DoctorDiddles_55, BigBubba_56, Lilizi_55, HanKaySha_54, Thresher_58, Easy2Say_56, Rakim_57, Bench_57, Kostya_56, CrystalP_55, Mindy_54, Cjw1_55, Marshmallow_54, MPhalcon_55, Icee_55, Moldemort_58, Pumpkin_57, Highbury_56, Eureka_53
- Track 5 : Phaja_53, NoSleep_57, IHOP_53, ShereKhan_53, StellaBean_53
- Track 6 : Maxxinsta_58, BilboSwaggins_54, Gage_58, Amao_55, Daikon_56, Quallification_56, Emmina_55, Petra64142_60
- Track 7 : Paperbeatsrock_54, YassJohnny_51
- Track 8 : Murica_57, Inca_52, Barbarian_55, Sassay_49, Youngblood_57, MISSy_55, Flypotenuse_50, Glexan_53, Kimchi_58, Asriel_55, FireRed_58, Willez_49, Hopey_55, Terminus_57, TBrady12_58, Sotrice96_56
- Track 9 : Palpatine_58, BugsBunny_56
- Track 10 : Teaspoon_53

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

The start number called the most often in the published annotations is 2, it was called in 51 of the 119 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_56, ABCat_53, Adnama_59, Argent26_58, Bask21_56, Bench_57, BigBubba_56, ChotaBhai_55, Cjw1_55, Command613_57, CrystalP_55, DoctorDiddles_55, DrDrey_55, Dumbo_55, Dusk_53, Easy2Say_56, Eureka_53, Gemini_59, Goldilocks_57, HanKaySha_54, Henry_54, Highbury_56, Holt_60, HufflyPuff_57, Icee_55, Kostya_56, Lilac_58, Lilizi_55, MPhalcon_55, MadamMonkfish_55, Marshmallow_54, Mindy_54, Moldemort_58, Murphy_57, NelitzaMV_52, OrionPax_54, Phrux_53, Pumpkin_57, Rakim_57, Saints25_56, ShamWow_55, Simpliphy_54, Stank_59, StolenFromERC_58, Thresher_58, Tomaszewski_51, Toto_54, Traaww1_51, Tucu_56, Wiggin_57, Xandras_55,

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

- Amao_55, AmericanBeauty_60, Asriel_55, BaboJay_51, BadStone_53, Balomoji_54, Barbarian_55, BilboSwaggins_54, Bruin_51, Buck_56, BugsBunny_56, Cactus_57, ChosenOne_56, Contagion_52, Cookies_52, Czyszczonek_56, Daikon_56, Elite2014_55, Elph10_55, Emmine_55, Filch_56, FireRed_58, Flypotenuse_50, Gage_58, Gator_53, Glexan_53, Goku_53, GoldenSpark_58, GooberAzure_58, Harella_55, Hoonter_58, Hopey_55, IHOP_53, Inca_52, JeTaime_56, Kanye_51, Kimchi_58, Lilpickle_55, MISSy_55, Manda_55, Maxxinista_58, Miniwave_52, Misfit_57, Mosby_51, Murica_57, Myrale_55, Nala_56, Nimrod_58, NoSleep_57, Palpatine_58, Paperbeatsrock_54, Pat3_53, Petra64142_60, Phaja_53, Pharsalus_53, PhatBacter_58, Phaux_57, Policronamos_60, Porky_54, Qualification_56, Rimmer_56, RiverMonster_56, Sassay_49, ShereKhan_53, SirDuracell_54, SophKB_52, Sotrice96_56, Stark_56, StellaBean_53, TBrady12_58, Tarkin_54, TeardropMSU_51, Teaspoon_53, Terminus_57, Ukulele_52, Willez_49, YassJohnny_51, Youngblood_57, xkcd_59,

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

-

Summary by start number:

Start 1:

- Found in 130 of 130 (100.0%) of genes in pham
- Manual Annotations of this start: 42 of 119
- Called 34.6% of time when present
- Phage (with cluster) where this start called: AmericanBeauty_60 (E), BaboJay_51 (E), BadStone_53 (E), Balomoji_54 (E), Bruin_51 (E), Buck_56 (E), Cactus_57 (E), ChosenOne_56 (E), Contagion_52 (E), Cookies_52 (E), Czyszczonek_56 (E), Elite2014_55 (E), Elph10_55 (E), Filch_56 (E), Gator_53 (E), Goku_53 (E), GoldenSpark_58 (E), GooberAzure_58 (E), Harella_55 (E), Hoonter_58 (E), JeTaime_56 (E), Kanye_51 (E), Lilpickle_55 (E), Manda_55 (E), Miniwave_52 (E), Misfit_57 (E), Mosby_51 (E), Myrale_55 (E), Nala_56 (E), Nimrod_58 (E), Pat3_53 (E), Pharsalus_53 (E), PhatBacter_58 (E), Phaux_57 (E), Policronamos_60 (E), Porky_54 (E), Rimmer_56 (E), RiverMonster_56 (E), SirDuracell_54 (E), SophKB_52 (E), Stark_56 (E), Tarkin_54 (E), TeardropMSU_51 (E), Ukulele_52 (E), xkcd_59 (E),

Start 2:

- Found in 130 of 130 (100.0%) of genes in pham
- Manual Annotations of this start: 51 of 119
- Called 39.2% of time when present
- Phage (with cluster) where this start called: 244_56 (E), ABCat_53 (E), Adnama_59 (E), Argent26_58 (E), Bask21_56 (E), Bench_57 (E), BigBubba_56 (E), ChotaBhai_55 (E), Cjw1_55 (E), Command613_57 (E), CrystalP_55 (E),

DoctorDiddles_55 (E), DrDrey_55 (E), Dumbo_55 (E), Dusk_53 (E), Easy2Say_56 (E), Eureka_53 (E), Gemini_59 (E), Goldilocks_57 (E), HanKaySha_54 (E), Henry_54 (E), Highbury_56 (E), Holt_60 (E), HufflyPuff_57 (E), Icee_55 (E), Kostya_56 (E), Lilac_58 (E), Lilizi_55 (E), MPhalcon_55 (E), MadamMonkfish_55 (E), Marshmallow_54 (E), Mindy_54 (E), Moldemort_58 (E), Murphy_57 (E), NelitzaMV_52 (E), OrionPax_54 (E), Phrux_53 (E), Pumpkin_57 (E), Rakim_57 (E), Saints25_56 (E), ShamWow_55 (E), Simpliphy_54 (E), Stank_59 (E), StolenFromERC_58 (E), Thresher_58 (E), Tomaszewski_51 (E), Toto_54 (E), Traaww1_51 (E), Tuco_56 (E), Wiggin_57 (E), Xandras_55 (E),

Start 3:

- Found in 130 of 130 (100.0%) of genes in pham
- Manual Annotations of this start: 18 of 119
- Called 13.8% of time when present
- Phage (with cluster) where this start called: Asriel_55 (E), Barbarian_55 (E), FireRed_58 (E), Flypotenuse_50 (E), Glexan_53 (E), Hopey_55 (E), Inca_52 (E), Kimchi_58 (E), MISSy_55 (E), Murica_57 (E), Paperbeatsrock_54 (E), Sassay_49 (E), Sotrice96_56 (E), TBrady12_58 (E), Terminus_57 (E), Willez_49 (E), YassJohnny_51 (E), Youngblood_57 (E),

Start 5:

- Found in 130 of 130 (100.0%) of genes in pham
- Manual Annotations of this start: 8 of 119
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Amao_55 (E), BilboSwaggins_54 (E), Daikon_56 (E), Emmina_55 (E), Gage_58 (E), IHOP_53 (E), Maxxinista_58 (E), NoSleep_57 (E), Petra64142_60 (E), Phaja_53 (E), Qualification_56 (E), ShereKhan_53 (E), StellaBean_53 (E),

Start 6:

- Found in 130 of 130 (100.0%) of genes in pham
- No Manual Annotations of this start.
- Called 2.3% of time when present
- Phage (with cluster) where this start called: BugsBunny_56 (E), Palpatine_58 (E), Teaspoon_53 (E),

Summary by clusters:

There is one cluster represented in this pham: E

Info for manual annotations of cluster E:

- Start number 1 was manually annotated 42 times for cluster E.
- Start number 2 was manually annotated 51 times for cluster E.
- Start number 3 was manually annotated 18 times for cluster E.
- Start number 5 was manually annotated 8 times for cluster E.

Gene Information:

Gene: 244_56 Start: 40247, Stop: 39816, Start Num: 2

Candidate Starts for 244_56:

(Start: 1 @40256 has 42 MA's), (Start: 2 @40247 has 51 MA's), (Start: 3 @40163 has 18 MA's), (4, 40139), (Start: 5 @40115 has 8 MA's), (6, 40079), (7, 40019), (8, 39998), (9, 39941), (10, 39932), (11, 39887), (12, 39878), (13, 39875),

Gene: ABCat_53 Start: 40893, Stop: 40462, Start Num: 2

Candidate Starts for ABCat_53:

(Start: 1 @40902 has 42 MA's), (Start: 2 @40893 has 51 MA's), (Start: 3 @40809 has 18 MA's), (4, 40785), (Start: 5 @40761 has 8 MA's), (6, 40725), (7, 40665), (8, 40644), (9, 40587), (10, 40578), (11, 40533), (12, 40524), (13, 40521), (14, 40491),

Gene: Adnama_59 Start: 40916, Stop: 40485, Start Num: 2

Candidate Starts for Adnama_59:

(Start: 1 @40925 has 42 MA's), (Start: 2 @40916 has 51 MA's), (Start: 3 @40832 has 18 MA's), (4, 40808), (Start: 5 @40784 has 8 MA's), (6, 40748), (7, 40688), (8, 40667), (9, 40610), (10, 40601), (11, 40556), (12, 40547), (13, 40544), (14, 40514),

Gene: Amao_55 Start: 39879, Stop: 39580, Start Num: 5

Candidate Starts for Amao_55:

(Start: 1 @40020 has 42 MA's), (Start: 2 @40011 has 51 MA's), (Start: 3 @39927 has 18 MA's), (4, 39903), (Start: 5 @39879 has 8 MA's), (6, 39843), (7, 39783), (8, 39762), (9, 39705), (10, 39696), (11, 39651), (12, 39642), (13, 39639), (14, 39609),

Gene: AmericanBeauty_60 Start: 40770, Stop: 40330, Start Num: 1

Candidate Starts for AmericanBeauty_60:

(Start: 1 @40770 has 42 MA's), (Start: 2 @40761 has 51 MA's), (Start: 3 @40677 has 18 MA's), (4, 40653), (Start: 5 @40629 has 8 MA's), (6, 40593), (7, 40533), (8, 40512), (9, 40455), (10, 40446), (11, 40401), (12, 40392), (13, 40389), (14, 40359),

Gene: Argent26_58 Start: 40399, Stop: 39968, Start Num: 2

Candidate Starts for Argent26_58:

(Start: 1 @40408 has 42 MA's), (Start: 2 @40399 has 51 MA's), (Start: 3 @40315 has 18 MA's), (4, 40291), (Start: 5 @40267 has 8 MA's), (6, 40231), (7, 40171), (8, 40150), (9, 40093), (10, 40084), (11, 40039), (12, 40030), (13, 40027), (14, 39997),

Gene: Asriel_55 Start: 39169, Stop: 38822, Start Num: 3

Candidate Starts for Asriel_55:

(Start: 1 @39262 has 42 MA's), (Start: 2 @39253 has 51 MA's), (Start: 3 @39169 has 18 MA's), (4, 39145), (Start: 5 @39121 has 8 MA's), (6, 39085), (7, 39025), (8, 39004), (9, 38947), (10, 38938), (11, 38893), (12, 38884), (13, 38881), (14, 38851),

Gene: BaboJay_51 Start: 39808, Stop: 39368, Start Num: 1

Candidate Starts for BaboJay_51:

(Start: 1 @39808 has 42 MA's), (Start: 2 @39799 has 51 MA's), (Start: 3 @39715 has 18 MA's), (4, 39691), (Start: 5 @39667 has 8 MA's), (6, 39631), (7, 39571), (8, 39550), (9, 39493), (10, 39484), (11, 39439), (12, 39430), (13, 39427), (14, 39397),

Gene: BadStone_53 Start: 40471, Stop: 40031, Start Num: 1

Candidate Starts for BadStone_53:

(Start: 1 @40471 has 42 MA's), (Start: 2 @40462 has 51 MA's), (Start: 3 @40378 has 18 MA's), (4, 40354), (Start: 5 @40330 has 8 MA's), (6, 40294), (7, 40234), (8, 40213), (9, 40156), (10, 40147), (11, 40102), (12, 40093), (13, 40090),

Gene: Balomoji_54 Start: 40739, Stop: 40299, Start Num: 1

Candidate Starts for Balomoji_54:

(Start: 1 @40739 has 42 MA's), (Start: 2 @40730 has 51 MA's), (Start: 3 @40646 has 18 MA's), (4, 40622), (Start: 5 @40598 has 8 MA's), (6, 40562), (7, 40502), (8, 40481), (9, 40424), (10, 40415), (11, 40370), (12, 40361), (13, 40358), (14, 40328),

Gene: Barbarian_55 Start: 39169, Stop: 38822, Start Num: 3

Candidate Starts for Barbarian_55:

(Start: 1 @39262 has 42 MA's), (Start: 2 @39253 has 51 MA's), (Start: 3 @39169 has 18 MA's), (4, 39145), (Start: 5 @39121 has 8 MA's), (6, 39085), (7, 39025), (8, 39004), (9, 38947), (10, 38938), (11, 38893), (12, 38884), (13, 38881), (14, 38851),

Gene: Bask21_56 Start: 39569, Stop: 39138, Start Num: 2

Candidate Starts for Bask21_56:

(Start: 1 @39578 has 42 MA's), (Start: 2 @39569 has 51 MA's), (Start: 3 @39485 has 18 MA's), (4, 39461), (Start: 5 @39437 has 8 MA's), (6, 39401), (7, 39341), (8, 39320), (9, 39263), (10, 39254), (11, 39209), (12, 39200), (13, 39197), (14, 39167),

Gene: Bench_57 Start: 40231, Stop: 39800, Start Num: 2

Candidate Starts for Bench_57:

(Start: 1 @40240 has 42 MA's), (Start: 2 @40231 has 51 MA's), (Start: 3 @40147 has 18 MA's), (4, 40123), (Start: 5 @40099 has 8 MA's), (6, 40063), (7, 40003), (8, 39982), (9, 39925), (10, 39916), (11, 39871), (12, 39862), (13, 39859), (14, 39829),

Gene: BigBubba_56 Start: 40272, Stop: 39841, Start Num: 2

Candidate Starts for BigBubba_56:

(Start: 1 @40281 has 42 MA's), (Start: 2 @40272 has 51 MA's), (Start: 3 @40188 has 18 MA's), (4, 40164), (Start: 5 @40140 has 8 MA's), (6, 40104), (7, 40044), (8, 40023), (9, 39966), (10, 39957), (11, 39912), (12, 39903), (13, 39900), (14, 39870),

Gene: BilboSwaggins_54 Start: 40769, Stop: 40470, Start Num: 5

Candidate Starts for BilboSwaggins_54:

(Start: 1 @40910 has 42 MA's), (Start: 2 @40901 has 51 MA's), (Start: 3 @40817 has 18 MA's), (4, 40793), (Start: 5 @40769 has 8 MA's), (6, 40733), (7, 40673), (8, 40652), (9, 40595), (10, 40586), (11, 40541), (12, 40532), (13, 40529), (14, 40499),

Gene: Bruin_51 Start: 39149, Stop: 38709, Start Num: 1

Candidate Starts for Bruin_51:

(Start: 1 @39149 has 42 MA's), (Start: 2 @39140 has 51 MA's), (Start: 3 @39056 has 18 MA's), (4, 39032), (Start: 5 @39008 has 8 MA's), (6, 38972), (7, 38912), (8, 38891), (9, 38834), (10, 38825), (11, 38780), (12, 38771), (13, 38768), (14, 38738),

Gene: Buck_56 Start: 40856, Stop: 40416, Start Num: 1

Candidate Starts for Buck_56:

(Start: 1 @40856 has 42 MA's), (Start: 2 @40847 has 51 MA's), (Start: 3 @40763 has 18 MA's), (4, 40739), (Start: 5 @40715 has 8 MA's), (6, 40679), (7, 40619), (8, 40598), (9, 40541), (10, 40532), (11, 40487), (12, 40478), (13, 40475), (14, 40445),

Gene: BugsBunny_56 Start: 40510, Stop: 40247, Start Num: 6

Candidate Starts for BugsBunny_56:

(Start: 1 @40687 has 42 MA's), (Start: 2 @40678 has 51 MA's), (Start: 3 @40594 has 18 MA's), (4, 40570), (Start: 5 @40546 has 8 MA's), (6, 40510), (7, 40450), (8, 40429), (9, 40372), (10, 40363), (11, 40318), (12, 40309), (13, 40306),

Gene: Cactus_57 Start: 39629, Stop: 39189, Start Num: 1

Candidate Starts for Cactus_57:

(Start: 1 @39629 has 42 MA's), (Start: 2 @39620 has 51 MA's), (Start: 3 @39536 has 18 MA's), (4, 39512), (Start: 5 @39488 has 8 MA's), (6, 39452), (7, 39392), (8, 39371), (9, 39314), (10, 39305), (11, 39260), (12, 39251), (13, 39248), (14, 39218),

Gene: ChosenOne_56 Start: 39929, Stop: 39489, Start Num: 1

Candidate Starts for ChosenOne_56:

(Start: 1 @39929 has 42 MA's), (Start: 2 @39920 has 51 MA's), (Start: 3 @39836 has 18 MA's), (4, 39812), (Start: 5 @39788 has 8 MA's), (6, 39752), (7, 39692), (8, 39671), (9, 39614), (10, 39605), (11, 39560), (12, 39551), (13, 39548), (14, 39518),

Gene: ChotaBhai_55 Start: 39942, Stop: 39511, Start Num: 2

Candidate Starts for ChotaBhai_55:

(Start: 1 @39951 has 42 MA's), (Start: 2 @39942 has 51 MA's), (Start: 3 @39858 has 18 MA's), (4, 39834), (Start: 5 @39810 has 8 MA's), (6, 39774), (7, 39714), (8, 39693), (9, 39636), (10, 39627), (11, 39582), (12, 39573), (13, 39570), (14, 39540),

Gene: Cjw1_55 Start: 41321, Stop: 40890, Start Num: 2

Candidate Starts for Cjw1_55:

(Start: 1 @41330 has 42 MA's), (Start: 2 @41321 has 51 MA's), (Start: 3 @41237 has 18 MA's), (4, 41213), (Start: 5 @41189 has 8 MA's), (6, 41153), (7, 41093), (8, 41072), (9, 41015), (10, 41006), (11, 40961), (12, 40952), (13, 40949), (14, 40919),

Gene: Command613_57 Start: 40659, Stop: 40228, Start Num: 2

Candidate Starts for Command613_57:

(Start: 1 @40668 has 42 MA's), (Start: 2 @40659 has 51 MA's), (Start: 3 @40575 has 18 MA's), (4, 40551), (Start: 5 @40527 has 8 MA's), (6, 40491), (7, 40431), (8, 40410), (9, 40353), (10, 40344), (11, 40299), (12, 40290), (13, 40287),

Gene: Contagion_52 Start: 39430, Stop: 38990, Start Num: 1

Candidate Starts for Contagion_52:

(Start: 1 @39430 has 42 MA's), (Start: 2 @39421 has 51 MA's), (Start: 3 @39337 has 18 MA's), (4, 39313), (Start: 5 @39289 has 8 MA's), (6, 39253), (7, 39193), (8, 39172), (9, 39115), (10, 39106), (11, 39061), (12, 39052), (13, 39049), (14, 39019),

Gene: Cookies_52 Start: 39801, Stop: 39361, Start Num: 1

Candidate Starts for Cookies_52:

(Start: 1 @39801 has 42 MA's), (Start: 2 @39792 has 51 MA's), (Start: 3 @39708 has 18 MA's), (4, 39684), (Start: 5 @39660 has 8 MA's), (6, 39624), (7, 39564), (8, 39543), (9, 39486), (10, 39477), (11, 39432), (12, 39423), (13, 39420), (14, 39390),

Gene: CrystalP_55 Start: 40901, Stop: 40470, Start Num: 2

Candidate Starts for CrystalP_55:

(Start: 1 @40910 has 42 MA's), (Start: 2 @40901 has 51 MA's), (Start: 3 @40817 has 18 MA's), (4, 40793), (Start: 5 @40769 has 8 MA's), (6, 40733), (7, 40673), (8, 40652), (9, 40595), (10, 40586), (11, 40541), (12, 40532), (13, 40529), (14, 40499),

Gene: Czyszczone1_56 Start: 40139, Stop: 39699, Start Num: 1

Candidate Starts for Czyszczone1_56:

(Start: 1 @40139 has 42 MA's), (Start: 2 @40130 has 51 MA's), (Start: 3 @40046 has 18 MA's), (4, 40022), (Start: 5 @39998 has 8 MA's), (6, 39962), (7, 39902), (8, 39881), (9, 39824), (10, 39815), (11, 39770), (12, 39761), (13, 39758), (14, 39728),

Gene: Daikon_56 Start: 40619, Stop: 40320, Start Num: 5

Candidate Starts for Daikon_56:

(Start: 1 @40760 has 42 MA's), (Start: 2 @40751 has 51 MA's), (Start: 3 @40667 has 18 MA's), (4, 40643), (Start: 5 @40619 has 8 MA's), (6, 40583), (7, 40523), (8, 40502), (9, 40445), (10, 40436), (11, 40391), (12, 40382), (13, 40379), (14, 40349),

Gene: DoctorDiddles_55 Start: 39978, Stop: 39547, Start Num: 2

Candidate Starts for DoctorDiddles_55:

(Start: 1 @39987 has 42 MA's), (Start: 2 @39978 has 51 MA's), (Start: 3 @39894 has 18 MA's), (4, 39870), (Start: 5 @39846 has 8 MA's), (6, 39810), (7, 39750), (8, 39729), (9, 39672), (10, 39663), (11, 39618), (12, 39609), (13, 39606), (14, 39576),

Gene: DrDrey_55 Start: 41049, Stop: 40618, Start Num: 2

Candidate Starts for DrDrey_55:

(Start: 1 @41058 has 42 MA's), (Start: 2 @41049 has 51 MA's), (Start: 3 @40965 has 18 MA's), (4, 40941), (Start: 5 @40917 has 8 MA's), (6, 40881), (7, 40821), (8, 40800), (9, 40743), (10, 40734), (11, 40689), (12, 40680), (13, 40677),

Gene: Dumbo_55 Start: 39825, Stop: 39394, Start Num: 2

Candidate Starts for Dumbo_55:

(Start: 1 @39834 has 42 MA's), (Start: 2 @39825 has 51 MA's), (Start: 3 @39741 has 18 MA's), (4, 39717), (Start: 5 @39693 has 8 MA's), (6, 39657), (7, 39597), (8, 39576), (9, 39519), (10, 39510), (11, 39465), (12, 39456), (13, 39453), (14, 39423),

Gene: Dusk_53 Start: 40122, Stop: 39691, Start Num: 2

Candidate Starts for Dusk_53:

(Start: 1 @40131 has 42 MA's), (Start: 2 @40122 has 51 MA's), (Start: 3 @40038 has 18 MA's), (4, 40014), (Start: 5 @39990 has 8 MA's), (6, 39954), (7, 39894), (8, 39873), (9, 39816), (10, 39807), (11, 39762), (12, 39753), (13, 39750),

Gene: Easy2Say_56 Start: 41363, Stop: 40932, Start Num: 2

Candidate Starts for Easy2Say_56:

(Start: 1 @41372 has 42 MA's), (Start: 2 @41363 has 51 MA's), (Start: 3 @41279 has 18 MA's), (4, 41255), (Start: 5 @41231 has 8 MA's), (6, 41195), (7, 41135), (8, 41114), (9, 41057), (10, 41048), (11, 41003), (12, 40994), (13, 40991), (14, 40961),

Gene: Elite2014_55 Start: 39928, Stop: 39488, Start Num: 1

Candidate Starts for Elite2014_55:

(Start: 1 @39928 has 42 MA's), (Start: 2 @39919 has 51 MA's), (Start: 3 @39835 has 18 MA's), (4, 39811), (Start: 5 @39787 has 8 MA's), (6, 39751), (7, 39691), (8, 39670), (9, 39613), (10, 39604), (11, 39559), (12, 39550), (13, 39547), (14, 39517),

Gene: Elph10_55 Start: 39637, Stop: 39197, Start Num: 1

Candidate Starts for Elph10_55:

(Start: 1 @39637 has 42 MA's), (Start: 2 @39628 has 51 MA's), (Start: 3 @39544 has 18 MA's), (4, 39520), (Start: 5 @39496 has 8 MA's), (6, 39460), (7, 39400), (8, 39379), (9, 39322), (10, 39313), (11, 39268), (12, 39259), (13, 39256), (14, 39226),

Gene: Emmina_55 Start: 39694, Stop: 39395, Start Num: 5

Candidate Starts for Emmina_55:

(Start: 1 @39835 has 42 MA's), (Start: 2 @39826 has 51 MA's), (Start: 3 @39742 has 18 MA's), (4, 39718), (Start: 5 @39694 has 8 MA's), (6, 39658), (7, 39598), (8, 39577), (9, 39520), (10, 39511), (11,

39466), (12, 39457), (13, 39454), (14, 39424),

Gene: Eureka_53 Start: 40390, Stop: 39959, Start Num: 2

Candidate Starts for Eureka_53:

(Start: 1 @40399 has 42 MA's), (Start: 2 @40390 has 51 MA's), (Start: 3 @40306 has 18 MA's), (4, 40282), (Start: 5 @40258 has 8 MA's), (6, 40222), (7, 40162), (8, 40141), (9, 40084), (10, 40075), (11, 40030), (12, 40021), (13, 40018), (14, 39988),

Gene: Filch_56 Start: 39860, Stop: 39420, Start Num: 1

Candidate Starts for Filch_56:

(Start: 1 @39860 has 42 MA's), (Start: 2 @39851 has 51 MA's), (Start: 3 @39767 has 18 MA's), (4, 39743), (Start: 5 @39719 has 8 MA's), (6, 39683), (7, 39623), (8, 39602), (9, 39545), (10, 39536), (11, 39491), (12, 39482), (13, 39479),

Gene: FireRed_58 Start: 41033, Stop: 40686, Start Num: 3

Candidate Starts for FireRed_58:

(Start: 1 @41126 has 42 MA's), (Start: 2 @41117 has 51 MA's), (Start: 3 @41033 has 18 MA's), (4, 41009), (Start: 5 @40985 has 8 MA's), (6, 40949), (7, 40889), (8, 40868), (9, 40811), (10, 40802), (11, 40757), (12, 40748), (13, 40745), (14, 40715),

Gene: Flypotenuse_50 Start: 39530, Stop: 39183, Start Num: 3

Candidate Starts for Flypotenuse_50:

(Start: 1 @39623 has 42 MA's), (Start: 2 @39614 has 51 MA's), (Start: 3 @39530 has 18 MA's), (4, 39506), (Start: 5 @39482 has 8 MA's), (6, 39446), (7, 39386), (8, 39365), (9, 39308), (10, 39299), (11, 39254), (12, 39245), (13, 39242), (14, 39212),

Gene: Gage_58 Start: 40267, Stop: 39968, Start Num: 5

Candidate Starts for Gage_58:

(Start: 1 @40408 has 42 MA's), (Start: 2 @40399 has 51 MA's), (Start: 3 @40315 has 18 MA's), (4, 40291), (Start: 5 @40267 has 8 MA's), (6, 40231), (7, 40171), (8, 40150), (9, 40093), (10, 40084), (11, 40039), (12, 40030), (13, 40027), (14, 39997),

Gene: Gator_53 Start: 40762, Stop: 40322, Start Num: 1

Candidate Starts for Gator_53:

(Start: 1 @40762 has 42 MA's), (Start: 2 @40753 has 51 MA's), (Start: 3 @40669 has 18 MA's), (4, 40645), (Start: 5 @40621 has 8 MA's), (6, 40585), (7, 40525), (8, 40504), (9, 40447), (10, 40438), (11, 40393), (12, 40384), (13, 40381),

Gene: Gemini_59 Start: 40916, Stop: 40485, Start Num: 2

Candidate Starts for Gemini_59:

(Start: 1 @40925 has 42 MA's), (Start: 2 @40916 has 51 MA's), (Start: 3 @40832 has 18 MA's), (4, 40808), (Start: 5 @40784 has 8 MA's), (6, 40748), (7, 40688), (8, 40667), (9, 40610), (10, 40601), (11, 40556), (12, 40547), (13, 40544), (14, 40514),

Gene: Glexan_53 Start: 40657, Stop: 40310, Start Num: 3

Candidate Starts for Glexan_53:

(Start: 1 @40750 has 42 MA's), (Start: 2 @40741 has 51 MA's), (Start: 3 @40657 has 18 MA's), (4, 40633), (Start: 5 @40609 has 8 MA's), (6, 40573), (7, 40513), (8, 40492), (9, 40435), (10, 40426), (11, 40381), (12, 40372), (13, 40369), (14, 40339),

Gene: Goku_53 Start: 40128, Stop: 39688, Start Num: 1

Candidate Starts for Goku_53:

(Start: 1 @40128 has 42 MA's), (Start: 2 @40119 has 51 MA's), (Start: 3 @40035 has 18 MA's), (4, 40011), (Start: 5 @39987 has 8 MA's), (6, 39951), (7, 39891), (8, 39870), (9, 39813), (10, 39804), (11, 39759), (12, 39750), (13, 39747), (14, 39717),

Gene: GoldenSpark_58 Start: 40408, Stop: 39968, Start Num: 1

Candidate Starts for GoldenSpark_58:

(Start: 1 @40408 has 42 MA's), (Start: 2 @40399 has 51 MA's), (Start: 3 @40315 has 18 MA's), (4, 40291), (Start: 5 @40267 has 8 MA's), (6, 40231), (7, 40171), (8, 40150), (9, 40093), (10, 40084), (11, 40039), (12, 40030), (13, 40027), (14, 39997),

Gene: Goldilocks_57 Start: 39901, Stop: 39470, Start Num: 2

Candidate Starts for Goldilocks_57:

(Start: 1 @39910 has 42 MA's), (Start: 2 @39901 has 51 MA's), (Start: 3 @39817 has 18 MA's), (4, 39793), (Start: 5 @39769 has 8 MA's), (6, 39733), (7, 39673), (8, 39652), (9, 39595), (10, 39586), (11, 39541), (12, 39532), (13, 39529), (14, 39499),

Gene: GooberAzure_58 Start: 40408, Stop: 39968, Start Num: 1

Candidate Starts for GooberAzure_58:

(Start: 1 @40408 has 42 MA's), (Start: 2 @40399 has 51 MA's), (Start: 3 @40315 has 18 MA's), (4, 40291), (Start: 5 @40267 has 8 MA's), (6, 40231), (7, 40171), (8, 40150), (9, 40093), (10, 40084), (11, 40039), (12, 40030), (13, 40027), (14, 39997),

Gene: HanKaySha_54 Start: 39709, Stop: 39278, Start Num: 2

Candidate Starts for HanKaySha_54:

(Start: 1 @39718 has 42 MA's), (Start: 2 @39709 has 51 MA's), (Start: 3 @39625 has 18 MA's), (4, 39601), (Start: 5 @39577 has 8 MA's), (6, 39541), (7, 39481), (8, 39460), (9, 39403), (10, 39394), (11, 39349), (12, 39340), (13, 39337), (14, 39307),

Gene: Harella_55 Start: 41266, Stop: 40826, Start Num: 1

Candidate Starts for Harella_55:

(Start: 1 @41266 has 42 MA's), (Start: 2 @41257 has 51 MA's), (Start: 3 @41173 has 18 MA's), (4, 41149), (Start: 5 @41125 has 8 MA's), (6, 41089), (7, 41029), (8, 41008), (9, 40951), (10, 40942), (11, 40897), (12, 40888), (13, 40885), (14, 40855),

Gene: Henry_54 Start: 40341, Stop: 39910, Start Num: 2

Candidate Starts for Henry_54:

(Start: 1 @40350 has 42 MA's), (Start: 2 @40341 has 51 MA's), (Start: 3 @40257 has 18 MA's), (4, 40233), (Start: 5 @40209 has 8 MA's), (6, 40173), (7, 40113), (8, 40092), (9, 40035), (10, 40026), (11, 39981), (12, 39972), (13, 39969),

Gene: Highbury_56 Start: 39998, Stop: 39567, Start Num: 2

Candidate Starts for Highbury_56:

(Start: 1 @40007 has 42 MA's), (Start: 2 @39998 has 51 MA's), (Start: 3 @39914 has 18 MA's), (4, 39890), (Start: 5 @39866 has 8 MA's), (6, 39830), (7, 39770), (8, 39749), (9, 39692), (10, 39683), (11, 39638), (12, 39629), (13, 39626), (14, 39596),

Gene: Holt_60 Start: 40813, Stop: 40382, Start Num: 2

Candidate Starts for Holt_60:

(Start: 1 @40822 has 42 MA's), (Start: 2 @40813 has 51 MA's), (Start: 3 @40729 has 18 MA's), (4, 40705), (Start: 5 @40681 has 8 MA's), (6, 40645), (7, 40585), (8, 40564), (9, 40507), (10, 40498), (11, 40453), (12, 40444), (13, 40441), (14, 40411),

Gene: Hoonter_58 Start: 40408, Stop: 39968, Start Num: 1

Candidate Starts for Hoonter_58:

(Start: 1 @40408 has 42 MA's), (Start: 2 @40399 has 51 MA's), (Start: 3 @40315 has 18 MA's), (4, 40291), (Start: 5 @40267 has 8 MA's), (6, 40231), (7, 40171), (8, 40150), (9, 40093), (10, 40084), (11, 40039), (12, 40030), (13, 40027), (14, 39997),

Gene: Hokey_55 Start: 40159, Stop: 39812, Start Num: 3

Candidate Starts for Hokey_55:

(Start: 1 @40252 has 42 MA's), (Start: 2 @40243 has 51 MA's), (Start: 3 @40159 has 18 MA's), (4, 40135), (Start: 5 @40111 has 8 MA's), (6, 40075), (7, 40015), (8, 39994), (9, 39937), (10, 39928), (11, 39883), (12, 39874), (13, 39871), (14, 39841),

Gene: HufflyPuff_57 Start: 41073, Stop: 40642, Start Num: 2

Candidate Starts for HufflyPuff_57:

(Start: 1 @41082 has 42 MA's), (Start: 2 @41073 has 51 MA's), (Start: 3 @40989 has 18 MA's), (4, 40965), (Start: 5 @40941 has 8 MA's), (6, 40905), (7, 40845), (8, 40824), (9, 40767), (10, 40758), (11, 40713), (12, 40704), (13, 40701), (14, 40671),

Gene: IHOP_53 Start: 40333, Stop: 40034, Start Num: 5

Candidate Starts for IHOP_53:

(Start: 1 @40474 has 42 MA's), (Start: 2 @40465 has 51 MA's), (Start: 3 @40381 has 18 MA's), (4, 40357), (Start: 5 @40333 has 8 MA's), (6, 40297), (7, 40237), (8, 40216), (9, 40159), (10, 40150), (11, 40105), (12, 40096), (13, 40093),

Gene: Icee_55 Start: 40067, Stop: 39636, Start Num: 2

Candidate Starts for Icee_55:

(Start: 1 @40076 has 42 MA's), (Start: 2 @40067 has 51 MA's), (Start: 3 @39983 has 18 MA's), (4, 39959), (Start: 5 @39935 has 8 MA's), (6, 39899), (7, 39839), (8, 39818), (9, 39761), (10, 39752), (11, 39707), (12, 39698), (13, 39695), (14, 39665),

Gene: Inca_52 Start: 38906, Stop: 38559, Start Num: 3

Candidate Starts for Inca_52:

(Start: 1 @38999 has 42 MA's), (Start: 2 @38990 has 51 MA's), (Start: 3 @38906 has 18 MA's), (4, 38882), (Start: 5 @38858 has 8 MA's), (6, 38822), (7, 38762), (8, 38741), (9, 38684), (10, 38675), (11, 38630), (12, 38621), (13, 38618), (14, 38588),

Gene: JeTaime_56 Start: 40902, Stop: 40462, Start Num: 1

Candidate Starts for JeTaime_56:

(Start: 1 @40902 has 42 MA's), (Start: 2 @40893 has 51 MA's), (Start: 3 @40809 has 18 MA's), (4, 40785), (Start: 5 @40761 has 8 MA's), (6, 40725), (7, 40665), (8, 40644), (9, 40587), (10, 40578), (11, 40533), (12, 40524), (13, 40521), (14, 40491),

Gene: Kanye_51 Start: 39762, Stop: 39322, Start Num: 1

Candidate Starts for Kanye_51:

(Start: 1 @39762 has 42 MA's), (Start: 2 @39753 has 51 MA's), (Start: 3 @39669 has 18 MA's), (4, 39645), (Start: 5 @39621 has 8 MA's), (6, 39585), (7, 39525), (8, 39504), (9, 39447), (10, 39438), (11, 39393), (12, 39384), (13, 39381),

Gene: Kimchi_58 Start: 40318, Stop: 39971, Start Num: 3

Candidate Starts for Kimchi_58:

(Start: 1 @40411 has 42 MA's), (Start: 2 @40402 has 51 MA's), (Start: 3 @40318 has 18 MA's), (4, 40294), (Start: 5 @40270 has 8 MA's), (6, 40234), (7, 40174), (8, 40153), (9, 40096), (10, 40087), (11, 40042), (12, 40033), (13, 40030), (14, 40000),

Gene: Kostya_56 Start: 40564, Stop: 40133, Start Num: 2

Candidate Starts for Kostya_56:

(Start: 1 @40573 has 42 MA's), (Start: 2 @40564 has 51 MA's), (Start: 3 @40480 has 18 MA's), (4, 40456), (Start: 5 @40432 has 8 MA's), (6, 40396), (7, 40336), (8, 40315), (9, 40258), (10, 40249), (11, 40204), (12, 40195), (13, 40192), (14, 40162),

Gene: Lilac_58 Start: 40028, Stop: 39597, Start Num: 2

Candidate Starts for Lilac_58:

(Start: 1 @40037 has 42 MA's), (Start: 2 @40028 has 51 MA's), (Start: 3 @39944 has 18 MA's), (4, 39920), (Start: 5 @39896 has 8 MA's), (6, 39860), (7, 39800), (8, 39779), (9, 39722), (10, 39713), (11, 39668), (12, 39659), (13, 39656),

Gene: Lilizi_55 Start: 39702, Stop: 39271, Start Num: 2

Candidate Starts for Lilizi_55:

(Start: 1 @39711 has 42 MA's), (Start: 2 @39702 has 51 MA's), (Start: 3 @39618 has 18 MA's), (4, 39594), (Start: 5 @39570 has 8 MA's), (6, 39534), (7, 39474), (8, 39453), (9, 39396), (10, 39387), (11, 39342), (12, 39333), (13, 39330), (14, 39300),

Gene: Lilpickle_55 Start: 39928, Stop: 39488, Start Num: 1

Candidate Starts for Lilpickle_55:

(Start: 1 @39928 has 42 MA's), (Start: 2 @39919 has 51 MA's), (Start: 3 @39835 has 18 MA's), (4, 39811), (Start: 5 @39787 has 8 MA's), (6, 39751), (7, 39691), (8, 39670), (9, 39613), (10, 39604), (11, 39559), (12, 39550), (13, 39547), (14, 39517),

Gene: MISSy_55 Start: 40042, Stop: 39695, Start Num: 3

Candidate Starts for MISSy_55:

(Start: 1 @40135 has 42 MA's), (Start: 2 @40126 has 51 MA's), (Start: 3 @40042 has 18 MA's), (4, 40018), (Start: 5 @39994 has 8 MA's), (6, 39958), (7, 39898), (8, 39877), (9, 39820), (10, 39811), (11, 39766), (12, 39757), (13, 39754), (14, 39724),

Gene: MPhalcon_55 Start: 40119, Stop: 39688, Start Num: 2

Candidate Starts for MPhalcon_55:

(Start: 1 @40128 has 42 MA's), (Start: 2 @40119 has 51 MA's), (Start: 3 @40035 has 18 MA's), (4, 40011), (Start: 5 @39987 has 8 MA's), (6, 39951), (7, 39891), (8, 39870), (9, 39813), (10, 39804), (11, 39759), (12, 39750), (13, 39747), (14, 39717),

Gene: MadamMonkfish_55 Start: 39643, Stop: 39212, Start Num: 2

Candidate Starts for MadamMonkfish_55:

(Start: 1 @39652 has 42 MA's), (Start: 2 @39643 has 51 MA's), (Start: 3 @39559 has 18 MA's), (4, 39535), (Start: 5 @39511 has 8 MA's), (6, 39475), (7, 39415), (8, 39394), (9, 39337), (10, 39328), (11, 39283), (12, 39274), (13, 39271), (14, 39241),

Gene: Manda_55 Start: 40933, Stop: 40493, Start Num: 1

Candidate Starts for Manda_55:

(Start: 1 @40933 has 42 MA's), (Start: 2 @40924 has 51 MA's), (Start: 3 @40840 has 18 MA's), (4, 40816), (Start: 5 @40792 has 8 MA's), (6, 40756), (7, 40696), (8, 40675), (9, 40618), (10, 40609), (11, 40564), (12, 40555), (13, 40552), (14, 40522),

Gene: Marshmallow_54 Start: 40899, Stop: 40468, Start Num: 2

Candidate Starts for Marshmallow_54:

(Start: 1 @40908 has 42 MA's), (Start: 2 @40899 has 51 MA's), (Start: 3 @40815 has 18 MA's), (4, 40791), (Start: 5 @40767 has 8 MA's), (6, 40731), (7, 40671), (8, 40650), (9, 40593), (10, 40584), (11, 40539), (12, 40530), (13, 40527), (14, 40497),

Gene: Maxxinista_58 Start: 39866, Stop: 39567, Start Num: 5

Candidate Starts for Maxxinista_58:

(Start: 1 @40007 has 42 MA's), (Start: 2 @39998 has 51 MA's), (Start: 3 @39914 has 18 MA's), (4, 39890), (Start: 5 @39866 has 8 MA's), (6, 39830), (7, 39770), (8, 39749), (9, 39692), (10, 39683), (11, 39638), (12, 39629), (13, 39626), (14, 39596),

Gene: Mindy_54 Start: 39507, Stop: 39076, Start Num: 2

Candidate Starts for Mindy_54:

(Start: 1 @39516 has 42 MA's), (Start: 2 @39507 has 51 MA's), (Start: 3 @39423 has 18 MA's), (4, 39399), (Start: 5 @39375 has 8 MA's), (6, 39339), (7, 39279), (8, 39258), (9, 39201), (10, 39192), (11, 39147), (12, 39138), (13, 39135), (14, 39105),

Gene: Miniwave_52 Start: 39969, Stop: 39529, Start Num: 1

Candidate Starts for Miniwave_52:

(Start: 1 @39969 has 42 MA's), (Start: 2 @39960 has 51 MA's), (Start: 3 @39876 has 18 MA's), (4, 39852), (Start: 5 @39828 has 8 MA's), (6, 39792), (7, 39732), (8, 39711), (9, 39654), (10, 39645), (11, 39600), (12, 39591), (13, 39588),

Gene: Misfit_57 Start: 41147, Stop: 40707, Start Num: 1

Candidate Starts for Misfit_57:

(Start: 1 @41147 has 42 MA's), (Start: 2 @41138 has 51 MA's), (Start: 3 @41054 has 18 MA's), (4, 41030), (Start: 5 @41006 has 8 MA's), (6, 40970), (7, 40910), (8, 40889), (9, 40832), (10, 40823), (11, 40778), (12, 40769), (13, 40766), (14, 40736),

Gene: Moldemort_58 Start: 40516, Stop: 40085, Start Num: 2

Candidate Starts for Moldemort_58:

(Start: 1 @40525 has 42 MA's), (Start: 2 @40516 has 51 MA's), (Start: 3 @40432 has 18 MA's), (4, 40408), (Start: 5 @40384 has 8 MA's), (6, 40348), (7, 40288), (8, 40267), (9, 40210), (10, 40201), (11, 40156), (12, 40147), (13, 40144), (14, 40114),

Gene: Mosby_51 Start: 39430, Stop: 38990, Start Num: 1

Candidate Starts for Mosby_51:

(Start: 1 @39430 has 42 MA's), (Start: 2 @39421 has 51 MA's), (Start: 3 @39337 has 18 MA's), (4, 39313), (Start: 5 @39289 has 8 MA's), (6, 39253), (7, 39193), (8, 39172), (9, 39115), (10, 39106), (11, 39061), (12, 39052), (13, 39049), (14, 39019),

Gene: Murica_57 Start: 40989, Stop: 40642, Start Num: 3

Candidate Starts for Murica_57:

(Start: 1 @41082 has 42 MA's), (Start: 2 @41073 has 51 MA's), (Start: 3 @40989 has 18 MA's), (4, 40965), (Start: 5 @40941 has 8 MA's), (6, 40905), (7, 40845), (8, 40824), (9, 40767), (10, 40758), (11, 40713), (12, 40704), (13, 40701), (14, 40671),

Gene: Murphy_57 Start: 40510, Stop: 40079, Start Num: 2

Candidate Starts for Murphy_57:

(Start: 1 @40519 has 42 MA's), (Start: 2 @40510 has 51 MA's), (Start: 3 @40426 has 18 MA's), (4, 40402), (Start: 5 @40378 has 8 MA's), (6, 40342), (7, 40282), (8, 40261), (9, 40204), (10, 40195), (11, 40150), (12, 40141), (13, 40138), (14, 40108),

Gene: Myrale_55 Start: 40773, Stop: 40333, Start Num: 1

Candidate Starts for Myrale_55:

(Start: 1 @40773 has 42 MA's), (Start: 2 @40764 has 51 MA's), (Start: 3 @40680 has 18 MA's), (4, 40656), (Start: 5 @40632 has 8 MA's), (6, 40596), (7, 40536), (8, 40515), (9, 40458), (10, 40449), (11,

40404), (12, 40395), (13, 40392), (14, 40362),

Gene: Nala_56 Start: 40640, Stop: 40200, Start Num: 1

Candidate Starts for Nala_56:

(Start: 1 @40640 has 42 MA's), (Start: 2 @40631 has 51 MA's), (Start: 3 @40547 has 18 MA's), (4, 40523), (Start: 5 @40499 has 8 MA's), (6, 40463), (7, 40403), (8, 40382), (9, 40325), (10, 40316), (11, 40271), (12, 40262), (13, 40259), (14, 40229),

Gene: NelitzaMV_52 Start: 39708, Stop: 39277, Start Num: 2

Candidate Starts for NelitzaMV_52:

(Start: 1 @39717 has 42 MA's), (Start: 2 @39708 has 51 MA's), (Start: 3 @39624 has 18 MA's), (4, 39600), (Start: 5 @39576 has 8 MA's), (6, 39540), (7, 39480), (8, 39459), (9, 39402), (10, 39393), (11, 39348), (12, 39339), (13, 39336),

Gene: Nimrod_58 Start: 41340, Stop: 40900, Start Num: 1

Candidate Starts for Nimrod_58:

(Start: 1 @41340 has 42 MA's), (Start: 2 @41331 has 51 MA's), (Start: 3 @41247 has 18 MA's), (4, 41223), (Start: 5 @41199 has 8 MA's), (6, 41163), (7, 41103), (8, 41082), (9, 41025), (10, 41016), (11, 40971), (12, 40962), (13, 40959), (14, 40929),

Gene: NoSleep_57 Start: 40138, Stop: 39839, Start Num: 5

Candidate Starts for NoSleep_57:

(Start: 1 @40279 has 42 MA's), (Start: 2 @40270 has 51 MA's), (Start: 3 @40186 has 18 MA's), (4, 40162), (Start: 5 @40138 has 8 MA's), (6, 40102), (7, 40042), (8, 40021), (9, 39964), (10, 39955), (11, 39910), (12, 39901), (13, 39898),

Gene: OrionPax_54 Start: 39715, Stop: 39284, Start Num: 2

Candidate Starts for OrionPax_54:

(Start: 1 @39724 has 42 MA's), (Start: 2 @39715 has 51 MA's), (Start: 3 @39631 has 18 MA's), (4, 39607), (Start: 5 @39583 has 8 MA's), (6, 39547), (7, 39487), (8, 39466), (9, 39409), (10, 39400), (11, 39355), (12, 39346), (13, 39343),

Gene: Palpatine_58 Start: 40935, Stop: 40672, Start Num: 6

Candidate Starts for Palpatine_58:

(Start: 1 @41112 has 42 MA's), (Start: 2 @41103 has 51 MA's), (Start: 3 @41019 has 18 MA's), (4, 40995), (Start: 5 @40971 has 8 MA's), (6, 40935), (7, 40875), (8, 40854), (9, 40797), (10, 40788), (11, 40743), (12, 40734), (13, 40731),

Gene: Paperbeatsrock_54 Start: 40554, Stop: 40207, Start Num: 3

Candidate Starts for Paperbeatsrock_54:

(Start: 1 @40647 has 42 MA's), (Start: 2 @40638 has 51 MA's), (Start: 3 @40554 has 18 MA's), (4, 40530), (Start: 5 @40506 has 8 MA's), (6, 40470), (7, 40410), (8, 40389), (9, 40332), (10, 40323), (11, 40278), (12, 40269), (13, 40266),

Gene: Pat3_53 Start: 38877, Stop: 38437, Start Num: 1

Candidate Starts for Pat3_53:

(Start: 1 @38877 has 42 MA's), (Start: 2 @38868 has 51 MA's), (Start: 3 @38784 has 18 MA's), (4, 38760), (Start: 5 @38736 has 8 MA's), (6, 38700), (7, 38640), (8, 38619), (9, 38562), (10, 38553), (11, 38508), (12, 38499), (13, 38496), (14, 38466),

Gene: Petra64142_60 Start: 41435, Stop: 41136, Start Num: 5

Candidate Starts for Petra64142_60:

(Start: 1 @41576 has 42 MA's), (Start: 2 @41567 has 51 MA's), (Start: 3 @41483 has 18 MA's), (4, 41459), (Start: 5 @41435 has 8 MA's), (6, 41399), (7, 41339), (8, 41318), (9, 41261), (10, 41252), (11, 41207), (12, 41198), (13, 41195), (14, 41165),

Gene: Phaja_53 Start: 40332, Stop: 40033, Start Num: 5

Candidate Starts for Phaja_53:

(Start: 1 @40473 has 42 MA's), (Start: 2 @40464 has 51 MA's), (Start: 3 @40380 has 18 MA's), (4, 40356), (Start: 5 @40332 has 8 MA's), (6, 40296), (7, 40236), (8, 40215), (9, 40158), (10, 40149), (11, 40104), (12, 40095), (13, 40092),

Gene: Pharsalus_53 Start: 40447, Stop: 40007, Start Num: 1

Candidate Starts for Pharsalus_53:

(Start: 1 @40447 has 42 MA's), (Start: 2 @40438 has 51 MA's), (Start: 3 @40354 has 18 MA's), (4, 40330), (Start: 5 @40306 has 8 MA's), (6, 40270), (7, 40210), (8, 40189), (9, 40132), (10, 40123), (11, 40078), (12, 40069), (13, 40066),

Gene: PhatBacter_58 Start: 41126, Stop: 40686, Start Num: 1

Candidate Starts for PhatBacter_58:

(Start: 1 @41126 has 42 MA's), (Start: 2 @41117 has 51 MA's), (Start: 3 @41033 has 18 MA's), (4, 41009), (Start: 5 @40985 has 8 MA's), (6, 40949), (7, 40889), (8, 40868), (9, 40811), (10, 40802), (11, 40757), (12, 40748), (13, 40745), (14, 40715),

Gene: Phaux_57 Start: 41124, Stop: 40684, Start Num: 1

Candidate Starts for Phaux_57:

(Start: 1 @41124 has 42 MA's), (Start: 2 @41115 has 51 MA's), (Start: 3 @41031 has 18 MA's), (4, 41007), (Start: 5 @40983 has 8 MA's), (6, 40947), (7, 40887), (8, 40866), (9, 40809), (10, 40800), (11, 40755), (12, 40746), (13, 40743), (14, 40713),

Gene: Phrux_53 Start: 39708, Stop: 39277, Start Num: 2

Candidate Starts for Phrux_53:

(Start: 1 @39717 has 42 MA's), (Start: 2 @39708 has 51 MA's), (Start: 3 @39624 has 18 MA's), (4, 39600), (Start: 5 @39576 has 8 MA's), (6, 39540), (7, 39480), (8, 39459), (9, 39402), (10, 39393), (11, 39348), (12, 39339), (13, 39336), (14, 39306),

Gene: Policronamos_60 Start: 41124, Stop: 40684, Start Num: 1

Candidate Starts for Policronamos_60:

(Start: 1 @41124 has 42 MA's), (Start: 2 @41115 has 51 MA's), (Start: 3 @41031 has 18 MA's), (4, 41007), (Start: 5 @40983 has 8 MA's), (6, 40947), (7, 40887), (8, 40866), (9, 40809), (10, 40800), (11, 40755), (12, 40746), (13, 40743),

Gene: Porky_54 Start: 39843, Stop: 39403, Start Num: 1

Candidate Starts for Porky_54:

(Start: 1 @39843 has 42 MA's), (Start: 2 @39834 has 51 MA's), (Start: 3 @39750 has 18 MA's), (4, 39726), (Start: 5 @39702 has 8 MA's), (6, 39666), (7, 39606), (8, 39585), (9, 39528), (10, 39519), (11, 39474), (12, 39465), (13, 39462), (14, 39432),

Gene: Pumpkin_57 Start: 40765, Stop: 40334, Start Num: 2

Candidate Starts for Pumpkin_57:

(Start: 1 @40774 has 42 MA's), (Start: 2 @40765 has 51 MA's), (Start: 3 @40681 has 18 MA's), (4, 40657), (Start: 5 @40633 has 8 MA's), (6, 40597), (7, 40537), (8, 40516), (9, 40459), (10, 40450), (11, 40405), (12, 40396), (13, 40393), (14, 40363),

Gene: Quallification_56 Start: 40621, Stop: 40322, Start Num: 5

Candidate Starts for Quallification_56:

(Start: 1 @40762 has 42 MA's), (Start: 2 @40753 has 51 MA's), (Start: 3 @40669 has 18 MA's), (4, 40645), (Start: 5 @40621 has 8 MA's), (6, 40585), (7, 40525), (8, 40504), (9, 40447), (10, 40438), (11, 40393), (12, 40384), (13, 40381), (14, 40351),

Gene: Rakim_57 Start: 40515, Stop: 40084, Start Num: 2

Candidate Starts for Rakim_57:

(Start: 1 @40524 has 42 MA's), (Start: 2 @40515 has 51 MA's), (Start: 3 @40431 has 18 MA's), (4, 40407), (Start: 5 @40383 has 8 MA's), (6, 40347), (7, 40287), (8, 40266), (9, 40209), (10, 40200), (11, 40155), (12, 40146), (13, 40143), (14, 40113),

Gene: Rimmer_56 Start: 40466, Stop: 40026, Start Num: 1

Candidate Starts for Rimmer_56:

(Start: 1 @40466 has 42 MA's), (Start: 2 @40457 has 51 MA's), (Start: 3 @40373 has 18 MA's), (4, 40349), (Start: 5 @40325 has 8 MA's), (6, 40289), (7, 40229), (8, 40208), (9, 40151), (10, 40142), (11, 40097), (12, 40088), (13, 40085), (14, 40055),

Gene: RiverMonster_56 Start: 40295, Stop: 39855, Start Num: 1

Candidate Starts for RiverMonster_56:

(Start: 1 @40295 has 42 MA's), (Start: 2 @40286 has 51 MA's), (Start: 3 @40202 has 18 MA's), (4, 40178), (Start: 5 @40154 has 8 MA's), (6, 40118), (7, 40058), (8, 40037), (9, 39980), (10, 39971), (11, 39926), (12, 39917), (13, 39914), (14, 39884),

Gene: Saints25_56 Start: 39998, Stop: 39567, Start Num: 2

Candidate Starts for Saints25_56:

(Start: 1 @40007 has 42 MA's), (Start: 2 @39998 has 51 MA's), (Start: 3 @39914 has 18 MA's), (4, 39890), (Start: 5 @39866 has 8 MA's), (6, 39830), (7, 39770), (8, 39749), (9, 39692), (10, 39683), (11, 39638), (12, 39629), (13, 39626), (14, 39596),

Gene: Sassay_49 Start: 38301, Stop: 37954, Start Num: 3

Candidate Starts for Sassay_49:

(Start: 1 @38394 has 42 MA's), (Start: 2 @38385 has 51 MA's), (Start: 3 @38301 has 18 MA's), (4, 38277), (Start: 5 @38253 has 8 MA's), (6, 38217), (7, 38157), (8, 38136), (9, 38079), (10, 38070), (11, 38025), (12, 38016), (13, 38013), (14, 37983),

Gene: ShamWow_55 Start: 40901, Stop: 40470, Start Num: 2

Candidate Starts for ShamWow_55:

(Start: 1 @40910 has 42 MA's), (Start: 2 @40901 has 51 MA's), (Start: 3 @40817 has 18 MA's), (4, 40793), (Start: 5 @40769 has 8 MA's), (6, 40733), (7, 40673), (8, 40652), (9, 40595), (10, 40586), (11, 40541), (12, 40532), (13, 40529), (14, 40499),

Gene: ShereKhan_53 Start: 40545, Stop: 40246, Start Num: 5

Candidate Starts for ShereKhan_53:

(Start: 1 @40686 has 42 MA's), (Start: 2 @40677 has 51 MA's), (Start: 3 @40593 has 18 MA's), (4, 40569), (Start: 5 @40545 has 8 MA's), (6, 40509), (7, 40449), (8, 40428), (9, 40371), (10, 40362), (11, 40317), (12, 40308), (13, 40305),

Gene: Simpliphy_54 Start: 39982, Stop: 39551, Start Num: 2

Candidate Starts for Simpliphy_54:

(Start: 1 @39991 has 42 MA's), (Start: 2 @39982 has 51 MA's), (Start: 3 @39898 has 18 MA's), (4, 39874), (Start: 5 @39850 has 8 MA's), (6, 39814), (7, 39754), (8, 39733), (9, 39676), (10, 39667), (11, 39622), (12, 39613), (13, 39610),

Gene: SirDuracell_54 Start: 38967, Stop: 38527, Start Num: 1

Candidate Starts for SirDuracell_54:

(Start: 1 @38967 has 42 MA's), (Start: 2 @38958 has 51 MA's), (Start: 3 @38874 has 18 MA's), (4, 38850), (Start: 5 @38826 has 8 MA's), (6, 38790), (7, 38730), (8, 38709), (9, 38652), (10, 38643), (11, 38598), (12, 38589), (13, 38586), (14, 38556),

Gene: SophKB_52 Start: 39666, Stop: 39226, Start Num: 1

Candidate Starts for SophKB_52:

(Start: 1 @39666 has 42 MA's), (Start: 2 @39657 has 51 MA's), (Start: 3 @39573 has 18 MA's), (4, 39549), (Start: 5 @39525 has 8 MA's), (6, 39489), (7, 39429), (8, 39408), (9, 39351), (10, 39342), (11, 39297), (12, 39288), (13, 39285),

Gene: Sotrice96_56 Start: 40279, Stop: 39932, Start Num: 3

Candidate Starts for Sotrice96_56:

(Start: 1 @40372 has 42 MA's), (Start: 2 @40363 has 51 MA's), (Start: 3 @40279 has 18 MA's), (4, 40255), (Start: 5 @40231 has 8 MA's), (6, 40195), (7, 40135), (8, 40114), (9, 40057), (10, 40048), (11, 40003), (12, 39994), (13, 39991), (14, 39961),

Gene: Stank_59 Start: 40915, Stop: 40484, Start Num: 2

Candidate Starts for Stank_59:

(Start: 1 @40924 has 42 MA's), (Start: 2 @40915 has 51 MA's), (Start: 3 @40831 has 18 MA's), (4, 40807), (Start: 5 @40783 has 8 MA's), (6, 40747), (7, 40687), (8, 40666), (9, 40609), (10, 40600), (11, 40555), (12, 40546), (13, 40543), (14, 40513),

Gene: Stark_56 Start: 40179, Stop: 39739, Start Num: 1

Candidate Starts for Stark_56:

(Start: 1 @40179 has 42 MA's), (Start: 2 @40170 has 51 MA's), (Start: 3 @40086 has 18 MA's), (4, 40062), (Start: 5 @40038 has 8 MA's), (6, 40002), (7, 39942), (8, 39921), (9, 39864), (10, 39855), (11, 39810), (12, 39801), (13, 39798), (14, 39768),

Gene: StellaBean_53 Start: 40093, Stop: 39794, Start Num: 5

Candidate Starts for StellaBean_53:

(Start: 1 @40234 has 42 MA's), (Start: 2 @40225 has 51 MA's), (Start: 3 @40141 has 18 MA's), (4, 40117), (Start: 5 @40093 has 8 MA's), (6, 40057), (7, 39997), (8, 39976), (9, 39919), (10, 39910), (11, 39865), (12, 39856), (13, 39853),

Gene: StolenFromERC_58 Start: 40399, Stop: 39968, Start Num: 2

Candidate Starts for StolenFromERC_58:

(Start: 1 @40408 has 42 MA's), (Start: 2 @40399 has 51 MA's), (Start: 3 @40315 has 18 MA's), (4, 40291), (Start: 5 @40267 has 8 MA's), (6, 40231), (7, 40171), (8, 40150), (9, 40093), (10, 40084), (11, 40039), (12, 40030), (13, 40027), (14, 39997),

Gene: TBrady12_58 Start: 40315, Stop: 39968, Start Num: 3

Candidate Starts for TBrady12_58:

(Start: 1 @40408 has 42 MA's), (Start: 2 @40399 has 51 MA's), (Start: 3 @40315 has 18 MA's), (4, 40291), (Start: 5 @40267 has 8 MA's), (6, 40231), (7, 40171), (8, 40150), (9, 40093), (10, 40084), (11, 40039), (12, 40030), (13, 40027), (14, 39997),

Gene: Tarkin_54 Start: 40656, Stop: 40216, Start Num: 1

Candidate Starts for Tarkin_54:

(Start: 1 @40656 has 42 MA's), (Start: 2 @40647 has 51 MA's), (Start: 3 @40563 has 18 MA's), (4, 40539), (Start: 5 @40515 has 8 MA's), (6, 40479), (7, 40419), (8, 40398), (9, 40341), (10, 40332), (11, 40287), (12, 40278), (13, 40275),

Gene: TeardropMSU_51 Start: 39656, Stop: 39216, Start Num: 1

Candidate Starts for TeardropMSU_51:

(Start: 1 @39656 has 42 MA's), (Start: 2 @39647 has 51 MA's), (Start: 3 @39563 has 18 MA's), (4, 39539), (Start: 5 @39515 has 8 MA's), (6, 39479), (7, 39419), (8, 39398), (9, 39341), (10, 39332), (11, 39287), (12, 39278), (13, 39275), (14, 39245),

Gene: Teaspoon_53 Start: 40373, Stop: 40110, Start Num: 6

Candidate Starts for Teaspoon_53:

(Start: 1 @40550 has 42 MA's), (Start: 2 @40541 has 51 MA's), (Start: 3 @40457 has 18 MA's), (4, 40433), (Start: 5 @40409 has 8 MA's), (6, 40373), (7, 40313), (8, 40292), (9, 40235), (10, 40226), (11, 40181), (12, 40172), (13, 40169), (14, 40139),

Gene: Terminus_57 Start: 41054, Stop: 40707, Start Num: 3

Candidate Starts for Terminus_57:

(Start: 1 @41147 has 42 MA's), (Start: 2 @41138 has 51 MA's), (Start: 3 @41054 has 18 MA's), (4, 41030), (Start: 5 @41006 has 8 MA's), (6, 40970), (7, 40910), (8, 40889), (9, 40832), (10, 40823), (11, 40778), (12, 40769), (13, 40766), (14, 40736),

Gene: Thresher_58 Start: 41524, Stop: 41093, Start Num: 2

Candidate Starts for Thresher_58:

(Start: 1 @41533 has 42 MA's), (Start: 2 @41524 has 51 MA's), (Start: 3 @41440 has 18 MA's), (4, 41416), (Start: 5 @41392 has 8 MA's), (6, 41356), (7, 41296), (8, 41275), (9, 41218), (10, 41209), (11, 41164), (12, 41155), (13, 41152), (14, 41122),

Gene: Tomaszewski_51 Start: 39520, Stop: 39089, Start Num: 2

Candidate Starts for Tomaszewski_51:

(Start: 1 @39529 has 42 MA's), (Start: 2 @39520 has 51 MA's), (Start: 3 @39436 has 18 MA's), (4, 39412), (Start: 5 @39388 has 8 MA's), (6, 39352), (7, 39292), (8, 39271), (9, 39214), (10, 39205), (11, 39160), (12, 39151), (13, 39148),

Gene: Toto_54 Start: 40901, Stop: 40470, Start Num: 2

Candidate Starts for Toto_54:

(Start: 1 @40910 has 42 MA's), (Start: 2 @40901 has 51 MA's), (Start: 3 @40817 has 18 MA's), (4, 40793), (Start: 5 @40769 has 8 MA's), (6, 40733), (7, 40673), (8, 40652), (9, 40595), (10, 40586), (11, 40541), (12, 40532), (13, 40529), (14, 40499),

Gene: Traaww1_51 Start: 40082, Stop: 39651, Start Num: 2

Candidate Starts for Traaww1_51:

(Start: 1 @40091 has 42 MA's), (Start: 2 @40082 has 51 MA's), (Start: 3 @39998 has 18 MA's), (4, 39974), (Start: 5 @39950 has 8 MA's), (6, 39914), (7, 39854), (8, 39833), (9, 39776), (10, 39767), (11, 39722), (12, 39713), (13, 39710), (14, 39680),

Gene: Tuco_56 Start: 41409, Stop: 40978, Start Num: 2

Candidate Starts for Tuco_56:

(Start: 1 @41418 has 42 MA's), (Start: 2 @41409 has 51 MA's), (Start: 3 @41325 has 18 MA's), (4, 41301), (Start: 5 @41277 has 8 MA's), (6, 41241), (7, 41181), (8, 41160), (9, 41103), (10, 41094), (11, 41049), (12, 41040), (13, 41037),

Gene: Ukulele_52 Start: 39804, Stop: 39364, Start Num: 1

Candidate Starts for Ukulele_52:

(Start: 1 @39804 has 42 MA's), (Start: 2 @39795 has 51 MA's), (Start: 3 @39711 has 18 MA's), (4, 39687), (Start: 5 @39663 has 8 MA's), (6, 39627), (7, 39567), (8, 39546), (9, 39489), (10, 39480), (11,

39435), (12, 39426), (13, 39423), (14, 39393),

Gene: Wiggin_57 Start: 40483, Stop: 40052, Start Num: 2

Candidate Starts for Wiggin_57:

(Start: 1 @40492 has 42 MA's), (Start: 2 @40483 has 51 MA's), (Start: 3 @40399 has 18 MA's), (4, 40375), (Start: 5 @40351 has 8 MA's), (6, 40315), (7, 40255), (8, 40234), (9, 40177), (10, 40168), (11, 40123), (12, 40114), (13, 40111), (14, 40081),

Gene: Willez_49 Start: 38301, Stop: 37954, Start Num: 3

Candidate Starts for Willez_49:

(Start: 1 @38394 has 42 MA's), (Start: 2 @38385 has 51 MA's), (Start: 3 @38301 has 18 MA's), (4, 38277), (Start: 5 @38253 has 8 MA's), (6, 38217), (7, 38157), (8, 38136), (9, 38079), (10, 38070), (11, 38025), (12, 38016), (13, 38013), (14, 37983),

Gene: Xandras_55 Start: 39894, Stop: 39463, Start Num: 2

Candidate Starts for Xandras_55:

(Start: 1 @39903 has 42 MA's), (Start: 2 @39894 has 51 MA's), (Start: 3 @39810 has 18 MA's), (4, 39786), (Start: 5 @39762 has 8 MA's), (6, 39726), (7, 39666), (8, 39645), (9, 39588), (10, 39579), (11, 39534), (12, 39525), (13, 39522), (14, 39492),

Gene: YassJohnny_51 Start: 39476, Stop: 39129, Start Num: 3

Candidate Starts for YassJohnny_51:

(Start: 1 @39569 has 42 MA's), (Start: 2 @39560 has 51 MA's), (Start: 3 @39476 has 18 MA's), (4, 39452), (Start: 5 @39428 has 8 MA's), (6, 39392), (7, 39332), (8, 39311), (9, 39254), (10, 39245), (11, 39200), (12, 39191), (13, 39188),

Gene: Youngblood_57 Start: 40984, Stop: 40637, Start Num: 3

Candidate Starts for Youngblood_57:

(Start: 1 @41077 has 42 MA's), (Start: 2 @41068 has 51 MA's), (Start: 3 @40984 has 18 MA's), (4, 40960), (Start: 5 @40936 has 8 MA's), (6, 40900), (7, 40840), (8, 40819), (9, 40762), (10, 40753), (11, 40708), (12, 40699), (13, 40696), (14, 40666),

Gene: xkcd_59 Start: 41267, Stop: 40827, Start Num: 1

Candidate Starts for xkcd_59:

(Start: 1 @41267 has 42 MA's), (Start: 2 @41258 has 51 MA's), (Start: 3 @41174 has 18 MA's), (4, 41150), (Start: 5 @41126 has 8 MA's), (6, 41090), (7, 41030), (8, 41009), (9, 40952), (10, 40943), (11, 40898), (12, 40889), (13, 40886), (14, 40856),