Figure S1. Consensus sequence of 171 bp alpha satellite monomer (Choo et al. 1991) and the annealing positions of primers used in qPCR.

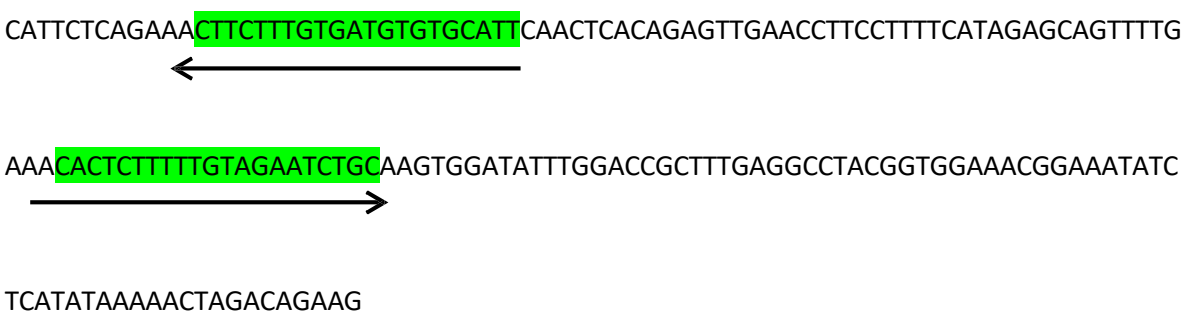
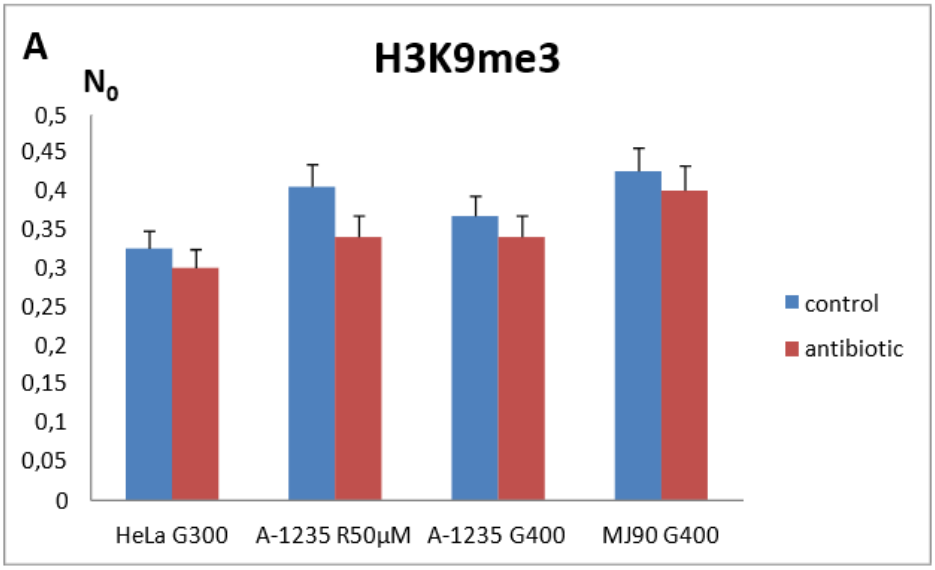


Figure S2. (**A**) H3K9me3 level at tandemly arranged alpha satellite arrays in: HeLa cells after treatment with geneticin (300 µg/ml), A-1235 cells after rifampicin (50 µM) treatment, A-1235 and MJ90hTERT cells after geneticin treatment (400 µg/ml). (**B**) H3K18Ac level at tandemly arranged alpha satellite arrays in MJ90hTERT cells after geneticin treatment (400 µg/ml). All treatments were 48 hrs.



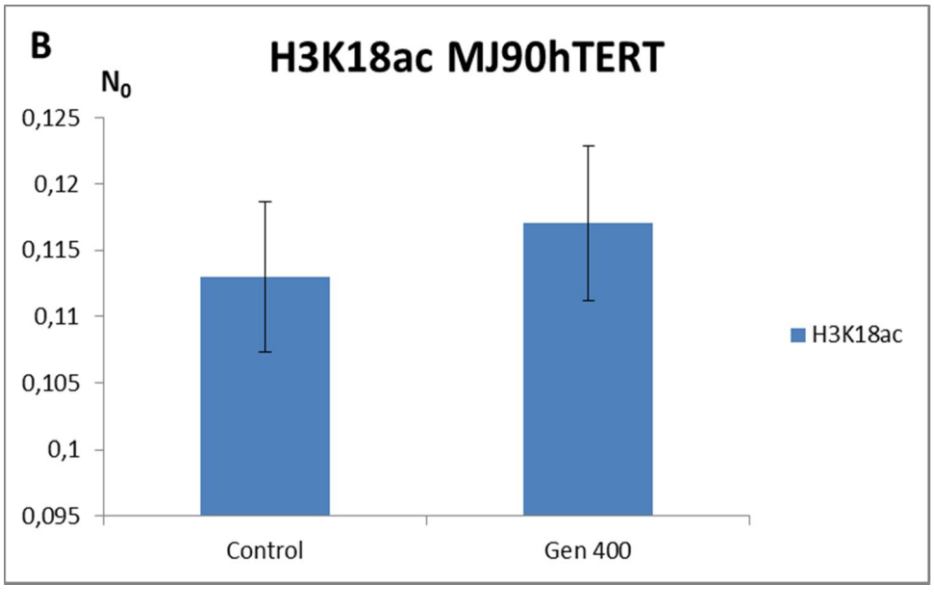
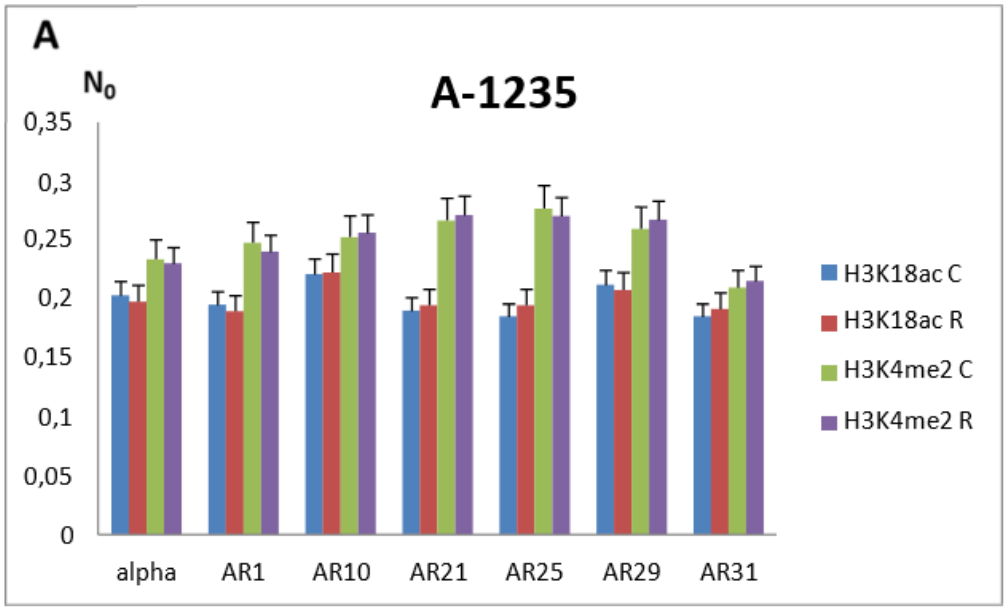


Figure S3. (A) H3K18Ac and H3K4me2 levels at tandemly arranged alpha satellite repeats and dispersed alpha repeats (AR) after treatment of A-1235 cells with rifampicin (82 µg/ml); (**B**) H3K4me2 levels of MJ90hTERT cells treated with geneticin (600 µg/ml). All treatments were 48 hrs. C denotes control.



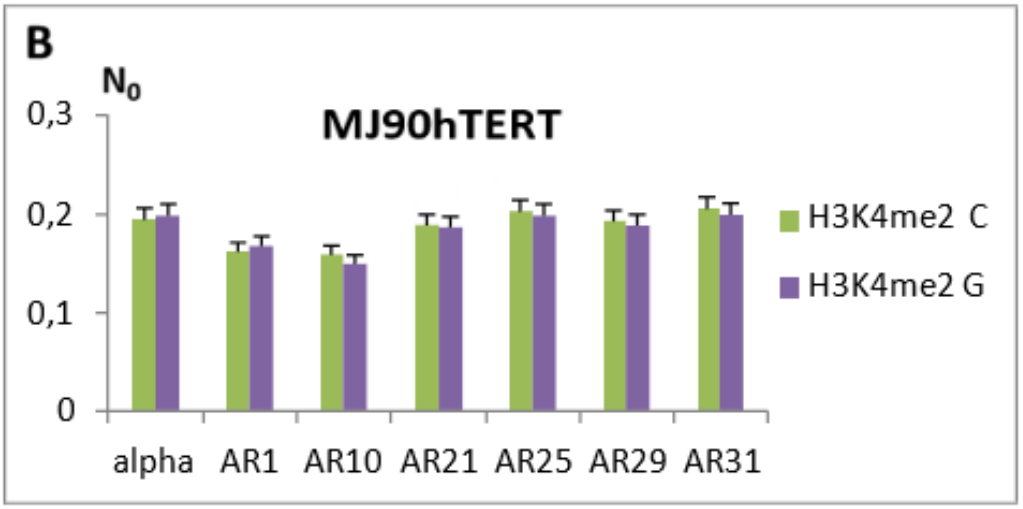


Figure S4. H3K18ac and H3K4me2 levels in HeLa cells after treatment with geneticin (400 μg/ml).

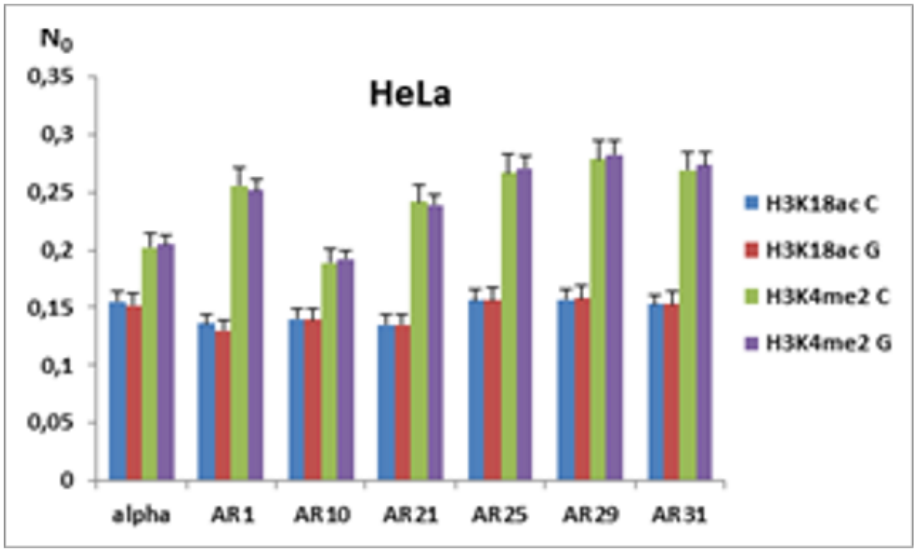


Table S1. List of primers used in ChIP-qPCR experiments. Sequence of alpha satellite modified primer used for transcriptional analysis of alpha satellite DNA is also included and modified bases are marked in bold.

Alpha repeat No	Primers fw	Primers rev
1	GCCTCCTGAGTTCAAGCAAC	GCATGGTGCCTCATTCCTAT
10	ACAGGGATATGAAACTCTAC	AAGGAAGAACTGGATGGG
21	GCACCACACTGGTCTTCC	CTGTATTTCAGCATGAGTGACAG
25	CGACATGGGTCCAGTCTGAT	AGGAATCTGGATATGTCTTCCA
29	GCTTACCTTGGCTTCTCAAAGT	TAGTAGACACCGGGTTTCACC
31	CGCTAATGCTGAAGACATGC	GAAGTGGAATGGGATCTGAAA
Alpha satellite	CACTCTTTTTGTAGAATCTGC	AATGCACACATCACAAAGAAG
Alpha sat modified		AATGCACATATCAC**T**A**T**G**T**A**C**