Method S7. Comparison of labeling techniques in aCGH analyses

For comparison of labeling methods the amplified DNA was labeled with five different techniques. Random-primed labeling (RP) was performed with the Genomic DNA Enzymatic Labeling Kit (Agilent Technologies) according to the manufacturer`s protocol (Version 6.4). For chemical labeling of the amplified DNA the Universal Linkage System™ (ULS) Labeling Kit (Agilent) was used and the reaction was performed in line with the manufacturer`s instructions. The MSE-PCR based methods were carried out as described by Stoecklein *et al.* [41]. Here the biotin- and digoxigenin-dUTPs were exchanged for directly labeled Cy5-/Cy3-dUTP (MSE1). For the second MSE-PCR (MSE2) based labeling we additionally incorporated Cy5-/Cy3-dCTP in the reaction depicted above. In the fifth PCR-based method Thermo Sequenase (TS) was used for fluorescent labeling with Cy5-/Cy3-dUTP and -dCTP instead of indirectly labeled nucleotides as reported by Fuhrmann *et al.* [20].