Analytical and Bioanalytical Chemistry

Electronic Supplementary Material

Targeted Next-Generation-Sequencing by Specific Capture of Multiple Genomic Loci Using Low-Volume Microfluidic DNA-Arrays

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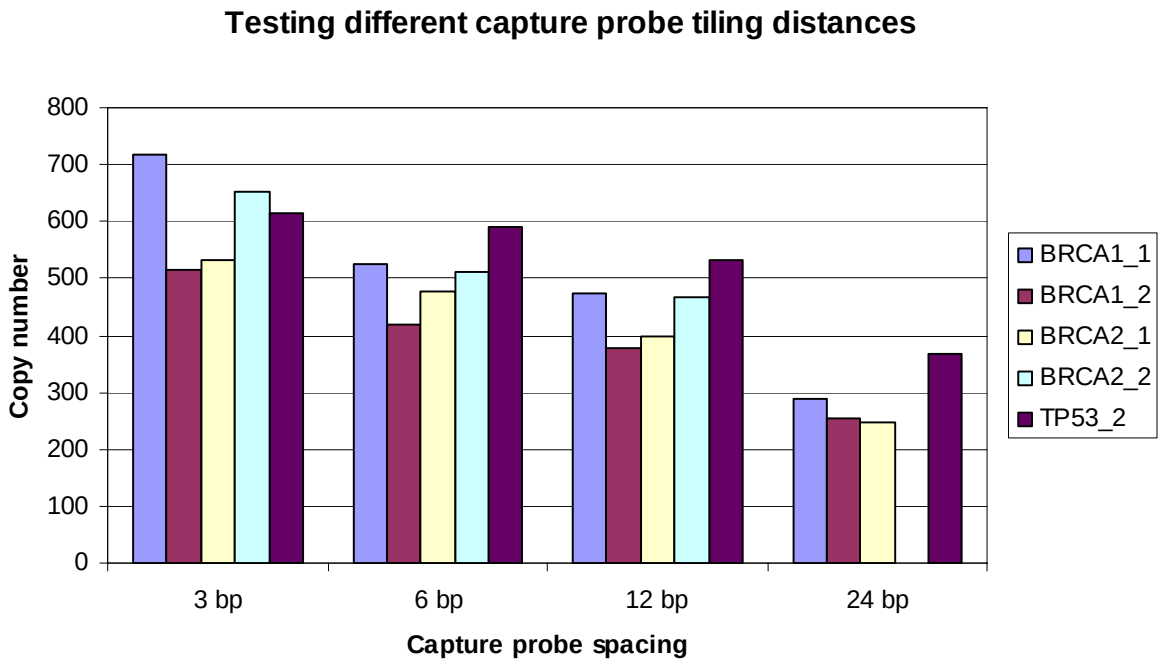

Fig S1. Testing different capture probe tiling distances. Four different Arrays were designed with 50mer capture probes for the *BRCA1*, *BRCA2* and *TP53* qPCR marker regions using different tiling distances for probe calculation from 3 to 24 bp. All arrays contain the same amount of capture probes. Free space was filled up with replicates. After hybridization and recovery of the bound DNA fragments the samples were analyzed by quantitative PCR using five independent primer sets. This experiment clearly shows that a higher density of individual capture probes is more advantageous for DNA enrichment than replicates of a smaller variety of probes and larger probe spacing.

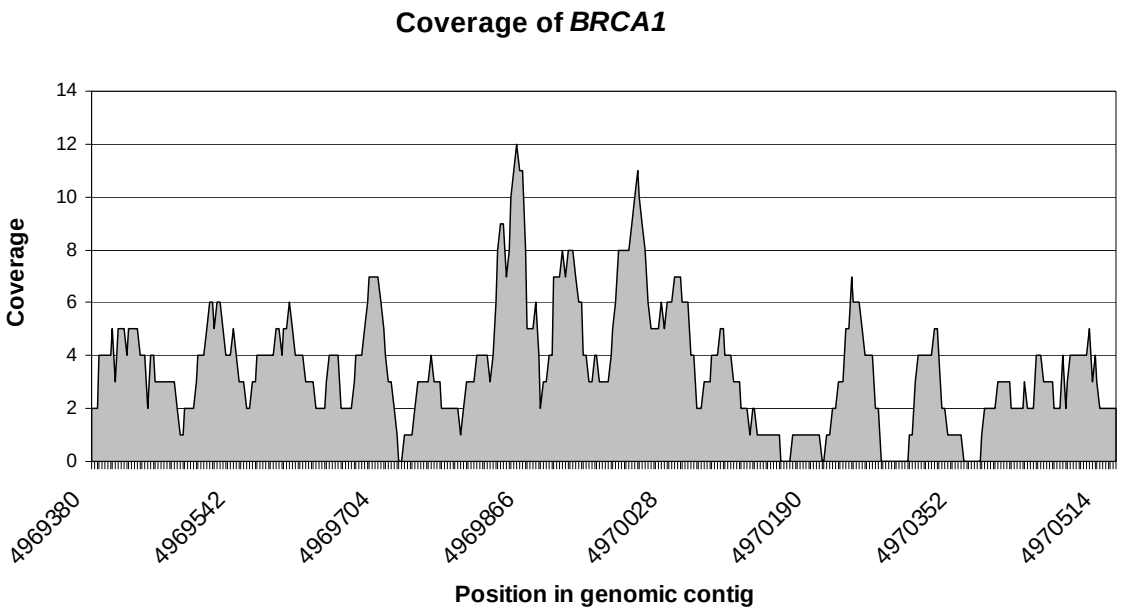

Fig S2. Coverage of *BRCA1*. The figure shows an exemplary close-up of the obtained distribution of sequence coverage within a 11 kb region of *BRCA1*.