Supplementary Figure 2: Validation of PCR-ELISA

**Figure 2** Efficiency of hybridization, cross-hybridization and comparability of PCR-ELISA measurements for the five double-stranded oligonucleotide tags. The five different oligonucleotide tags were amplified by PCR using an unlabeled sense primer and a 5’-digoxigenin-labeled antisense primer, and PCR-products were denatured and hybridized to the biotinylated complementary or non-complementary capture oligonucleotides I to V, respectively. After capturing on streptavidin-coated microtiter plates and stringent washing, bound oligonucleotide were detected by a HRP-labeled anti-digoxigenin antibody using the chromogenic substrate ABTS at an absorbance of 405 nm. Hybridization analyses were performed in duplicate and variance of OD readings are given by vertical bars. The hybridization efficiency for the oligonucleotide tags I, II, IV and V were well comparable. An decrease of 40% in hybridization efficiency was observed for the oligonucleotide tag III, for which signal intensities of OTM data were corrected in further binding studies. No significant cross-hybridization between oligonucleotide tags and non-complementary capture oligonucleotides was observed.