

Supporting Information

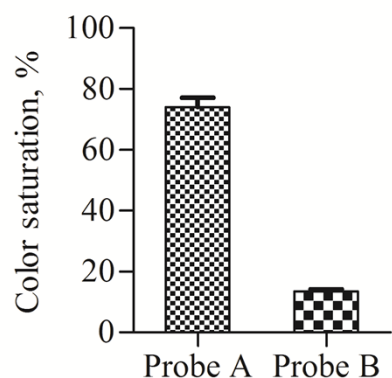


Fig. S.1: Covalent coupling of oligonucleotides to APP μ TP through end labelled $-\text{NH}_2$ moiety. Amino modified Probe A showed excellent immobilization whereas probe B (no amino labelling) fails to bind the activated surface; showing that it's the end labelled amine group that participates in covalent coupling and not the amine groups of bases.

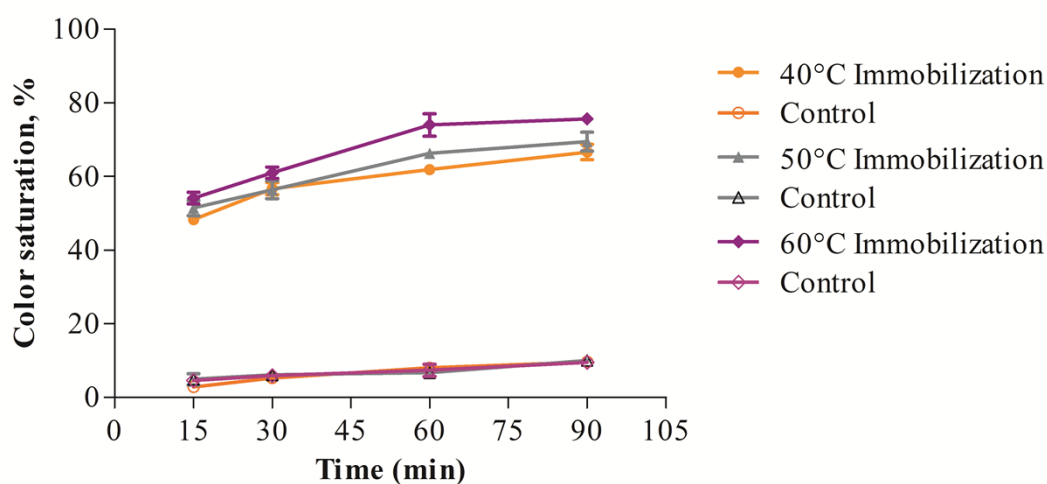


Fig.S2. Effect of incubation time and temperature for oligonucleotide immobilization on APP μ TP. In all sets of experiments, 100 nM of probe A was used, while the control experiments were performed using same concentration of unlabelled probe B.

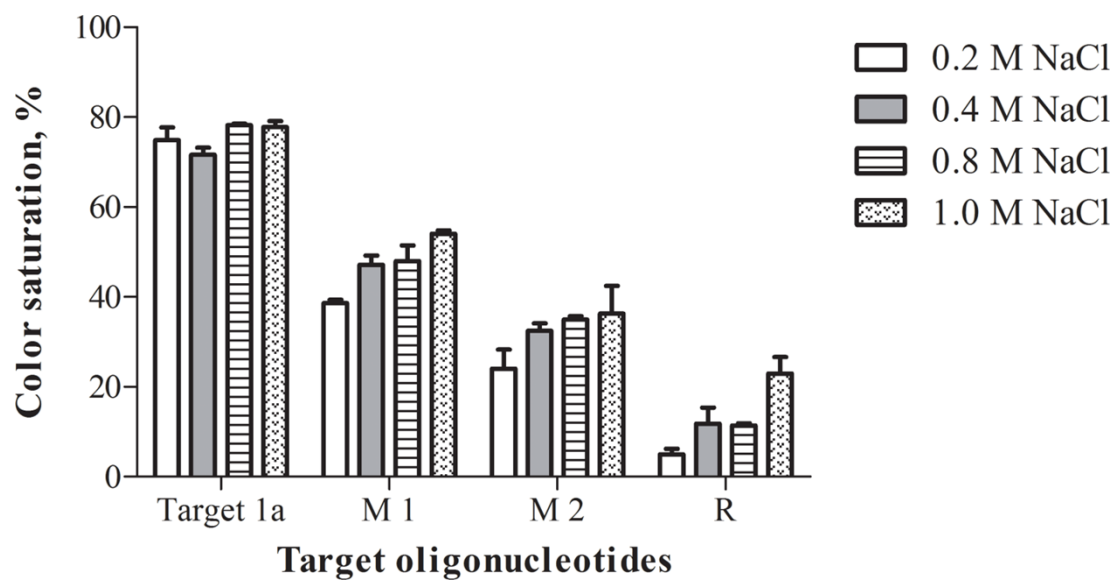


Fig.S3. Effect of salt concentration on oligonucleotide hybridization. Equimolar concentration (100 nM) of probe 1 was immobilized to APP μ TP followed by hybridization with 100 nM of target 1a, mismatch 1, mismatch 2 and random sequence respectively. Colour is quantified by colour saturation.