

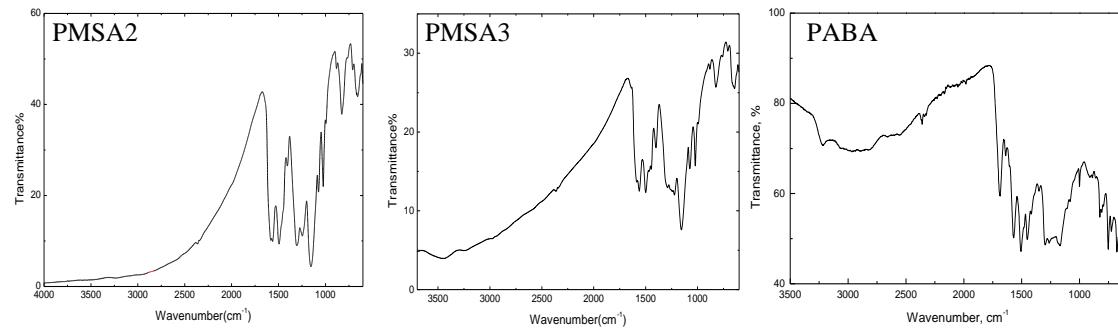
Supplementary Information

Thin films of substituted polyanilines: interactions with biomolecular systems

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Figure S1. A) FTIR and B) ^1H NMR spectra of PMSA2, PMSA3 and PABA

A)



B)

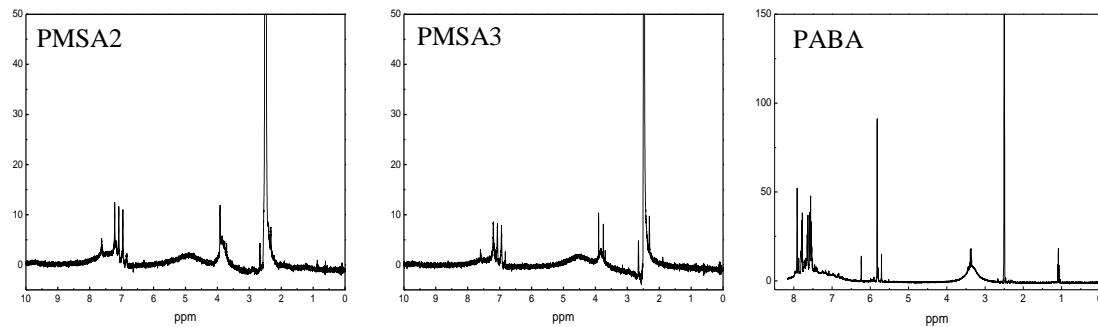


Figure S2. Cyclic voltammograms of a) PMSA1 b) PMSA2 c) PMSA3 and d) PABA polymers immobilized on gold electrode surface. Experimental conditions: 5 mM potassium phosphate buffer (PPB), pH 7, scan rates are varied between 5 and 230 mV/s.

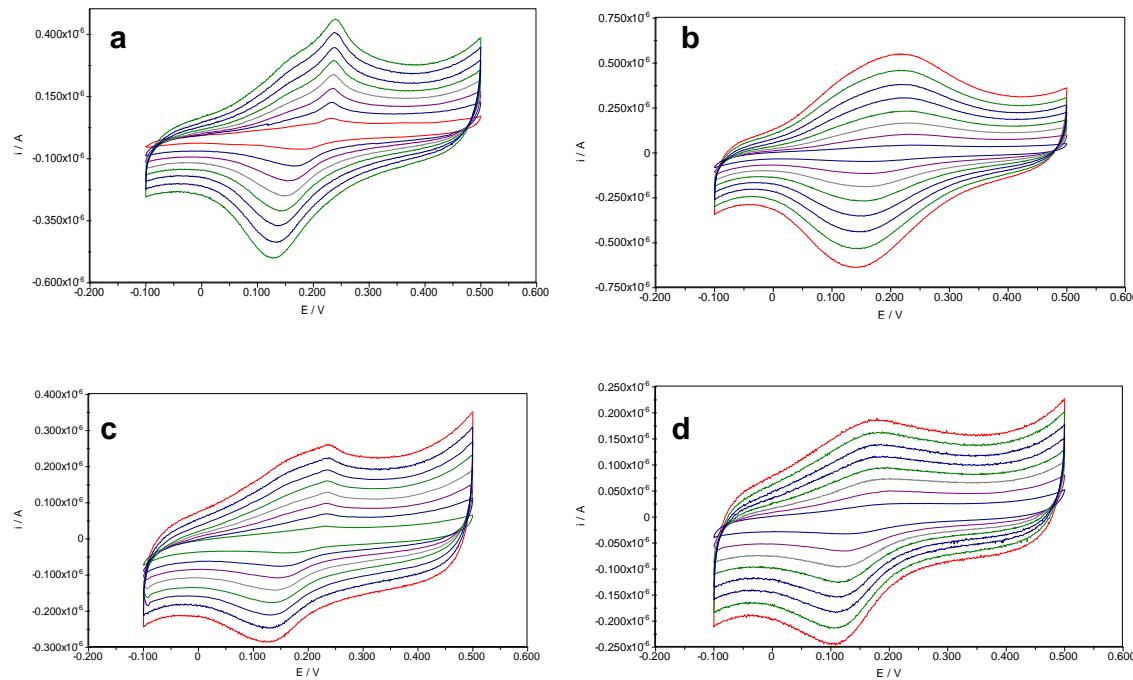
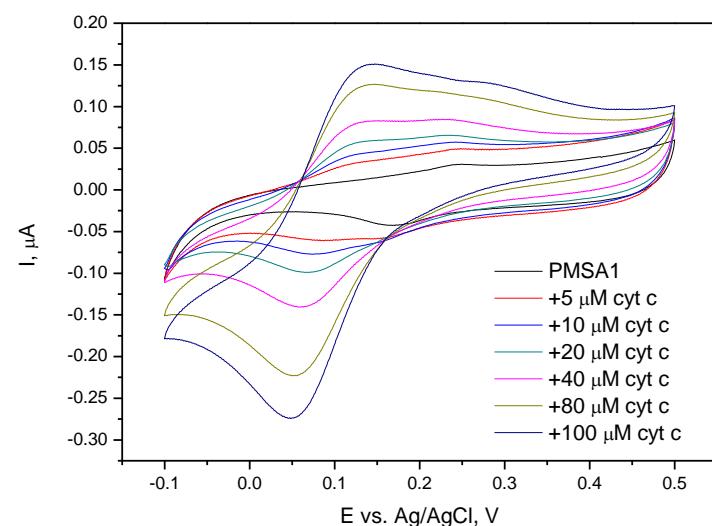


Table S1. Formal potentials of different copolymers. Experimental conditions: 5 mM PPB buffer, pH 7

Polymer	E_f, V
PMSA1	0.185 ± 0.005
PMSA2	0.178 ± 0.003
PMSA3	0.190 ± 0.005
PABA	0.187 ± 0.004

Figure S3. A) Cyclic voltammograms of PMSA1-modified electrode in the presence of increasing cyt c concentrations in solution and B) changes in peak current vs. square root of the scan rate ($[cyt\ c] = 100\ \mu M$). Experimental conditions: 5 mM potassium phosphate buffer (PPB), pH 7, scan rates are varied between 5 and 160 mV/s.

A)



B)

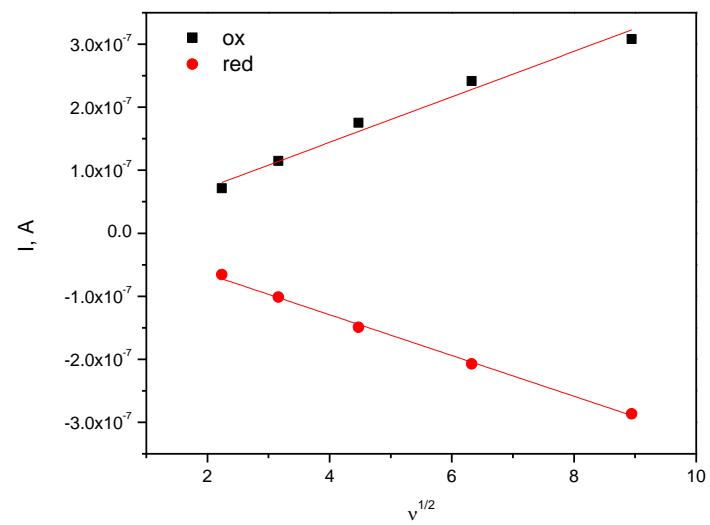
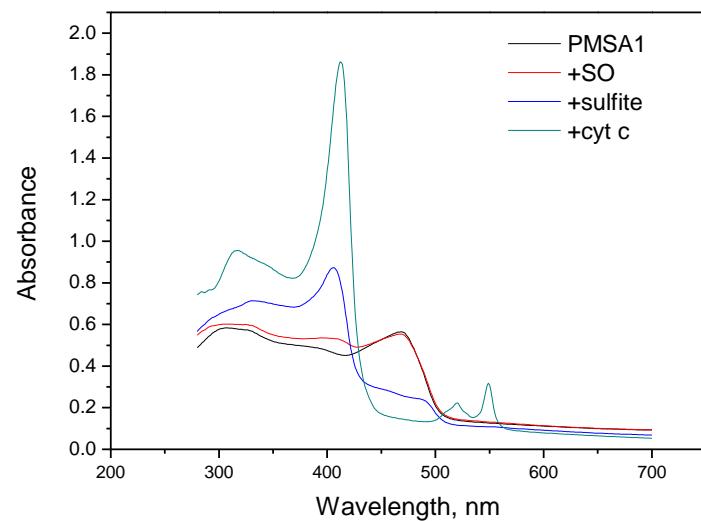
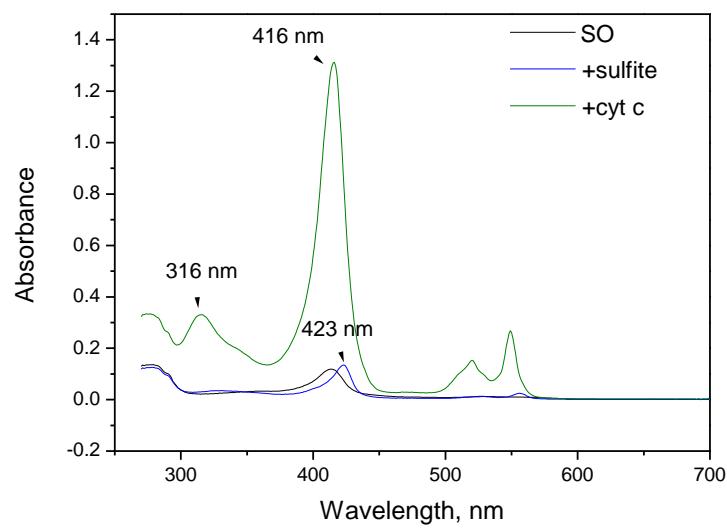


Figure S4. UV-Vis spectra: A) of the polymer PMSA1 in solution, after addition of SO, then sulfite, and finally cyt c; B) in the absence of polymer: of SO, after addition of sulfite, and finally cyt c; C) comparative spectra taken from reference 44. Measurements were done in 5mM PPB at pH 7, [PMSA1] = 40 μ g/ml, [SO] = 1 μ M, [sulfite] = 1mM, [cyt c] = 10 μ M.

A)



B)



C)

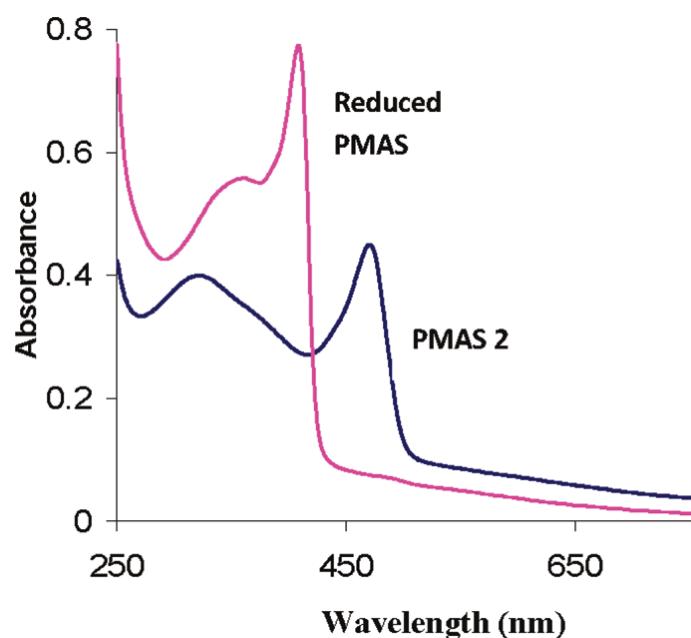
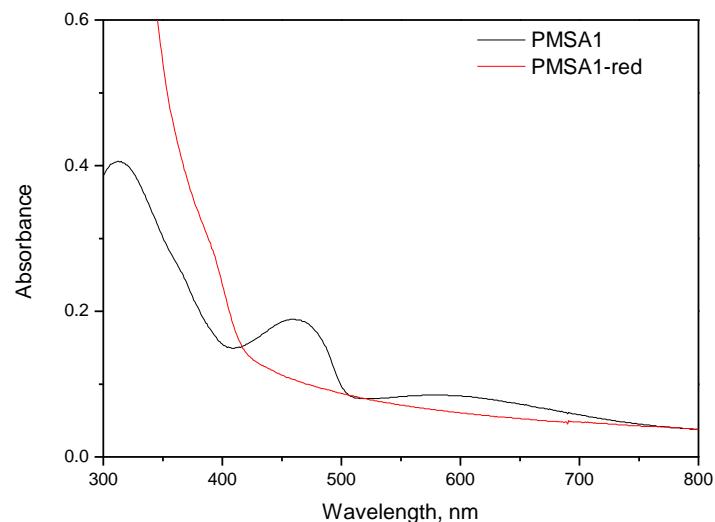
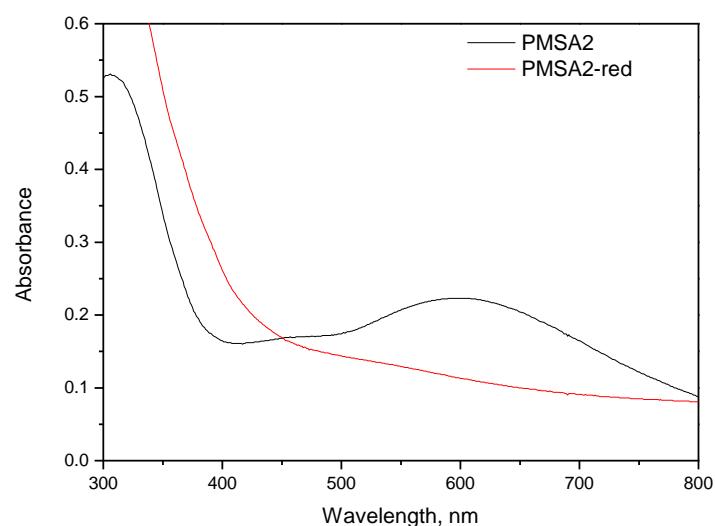


Figure S5. UV-Vis spectra of oxidized and reduced species of a) PMSA1 b) PMSA2 c) PABA polymers in DMSO. The polymers have been reduced by sodium dithionite.

a)



b)



c)

