

Protein-resistant polymer surfaces

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Supplementary information

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Table S1: List of swelling degree (DS) and water uptake (W) of the used polymers

Polymer	DS (in water)	W (in water)
<i>hydrophobic polymers</i>		
PS	1	0
PMMA	1	0
PFA	1	0
<i>hydrophilic polymers</i>		
<i>PMMA-PEG(n)</i>		
<i>n</i> = 0	1	0
1	1.04	4
2	1.2	20
7,3 ^a	1.53	53
22,8	2.9	190
<i>PDMAAm - X% MMA</i>		
<i>X</i> = 0	2.3	130
0.5	2.4	140
1	2.4	140
2.5	2.25	125
5	2.6	160
10	2.5	150
20	2.65	165
40	2.05	105
60	1.18	18
80	1.04	4
90	1.03	3
100	1	0
PHEMA	1.65	65
<i>anionic hydrophilic polymers</i>		
PAA	1 ^b 4.7 ^c	0 ^b 370 ^c
PDMAAm-AA	2.88	188
PDMAAm - SSNa	2.35 2.35 ^d	135 135 ^d
PDMAAm - SAK	4.30 4.25 ^d	330 325 ^d
<i>cationic hydrophilic polymers</i>		
PMTA	- ^e	- ^e

^a contains 5% MABP

^b in TRIS buffer with 0.1 M CaCl₂

^c in TRIS buffer with 0.2 M NaCl

^d in PBS

^e thick layers were unstable, so that the swelling could not be measured

Table S2: Dependency of fibrinogen adsorption to the HEMA content in PDMAAm – X% HEMA copolymers

PDMAAm- X% HEMA	fibrinogen adsorption swollen (nm ± 0.5nm)	fibrinogen adsorption dry (nm ± 0.5nm)
X = 100	1.2	6.4
95	1.5	2.0
90	2.0	2.5
80	1.2	1.5
60	1.1	0.5
40	0	0
0	0	0