Supplementary information

Specificity recognition for a target protein, cytochrome c using molecularly imprinted hydrogels

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Table S1 Compositions of MIP gels with different template-functional monomer ratios.

14G' (μL)	Cytochrome c (mM)	10% SA (μL)	1 mM tris-HCl (mL)	20% (w/w) APS (μL)	TEMED (μL)
214.3 (111 mM)	0.03	29.5 (6.8 mM)	3	6	1
	0.3				
	0.425				
	0.68				
	1.5				

The SA and APS was dissolved into water before use.

Table S2 Compositions of MIP gels with different crosslinker lengths.

Crosslinker	Crosslinker volume (μL)	Cytochrome c (mM)	10% SA (μL)	1 mM tris-HCl (mL)	20% (w/w) APS (μL)	TEMED (μL)
9G'	214.3 (111 mM)	0.297	29.5 (6.8 mM)	3	6	1
14G'						
23G'						

Table S3 Compositions of MIP gels with different crosslinker ratios.

Crosslinker ratio	23G' (mg)	AM-90G (μL)	Cytochrom c (mM)	10% SA (μL)	1 mM tris-HCl (mL)	TEMED/20% APS (μL)
8/2	188.6 (88.9 mM)	42.9 (22.2 mM)	0.297	29.5 (6.8 mM)	3	1/6
6/4	141.4 (66.7 mM)	85.7 (44.4 mM)				
4/6	94.3 (44.4 mM)	128.6 (66.7 mM)				

Table S4 Compositions of the 8% acrylamide gel.

40% acrylamide/bis (mL)	1 M tris-HCl (μL)	H_2O (mL)	TEMED/20% APS (μL)
2	10	8	2/20

Table S5 Molecular weight and isoelectric point of proteins.

Protein	Molecular weight (kDa)	Isoelectric point, *p*I
Cytochrome c	12.3	10.2
Lysozyme	14.4	10.8
Trypsin	23.8	10.6
BSA	66.0	4.7

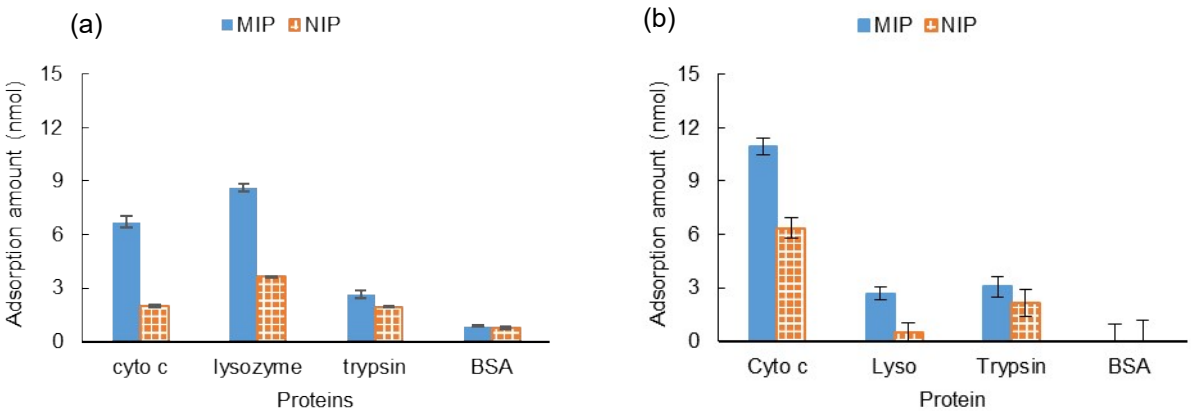

Fig. S1 The adsorption amount of MIP and NIP gels to different proteins when using a protein mixture as sample. (a) 1 mM tris-HCl, 20 mM NaCl and (b) 10 mM HCl as adsorption solution.