Electronic Supplementary Material (ESI) for RSC Advances.

Electronic Supporting Information (ESI):

Electrochemical Detection of Epinephrine Using a Biomimic Made Up of Hemin Modified Molecularly Imprinted Microspheres

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Figures

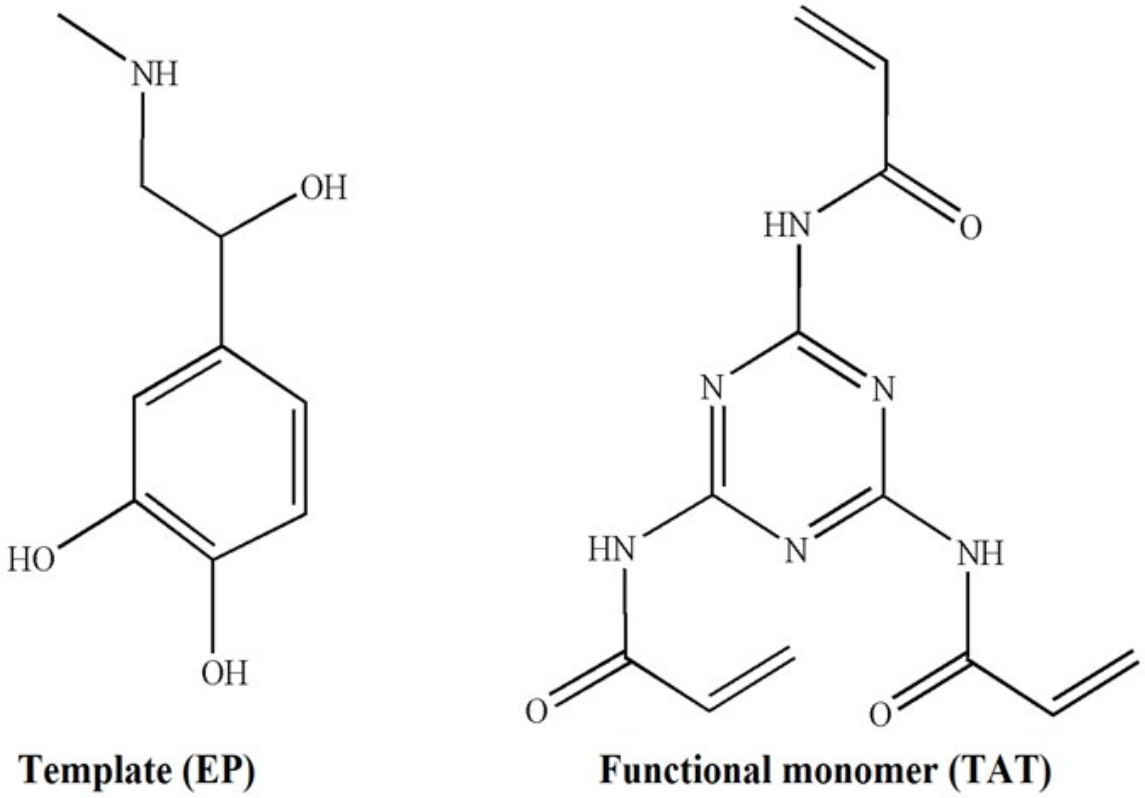

Figure S1: Chemical structures of template, epinephrine (EP) and trifunctional monomer, 2,4,6-trisacrylamido-1,3,5-triazine (TAT).

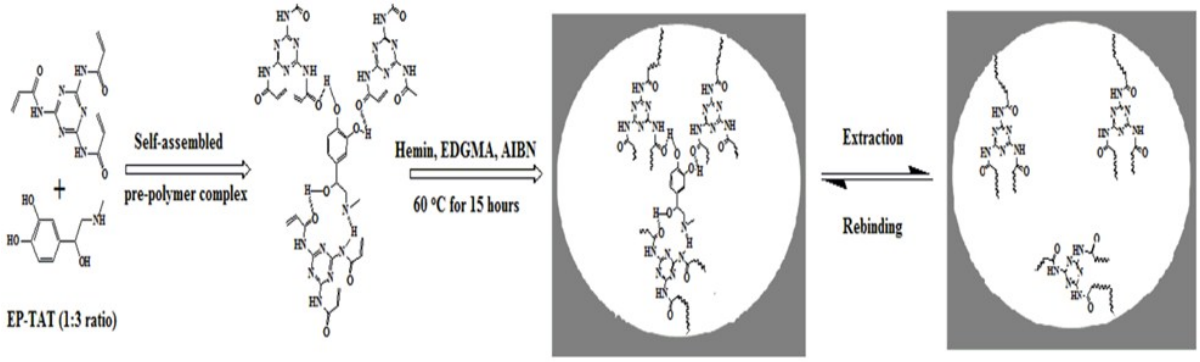

Figure S2: Schematic representation of the preparation of hemin modified EP imprinted polymer.

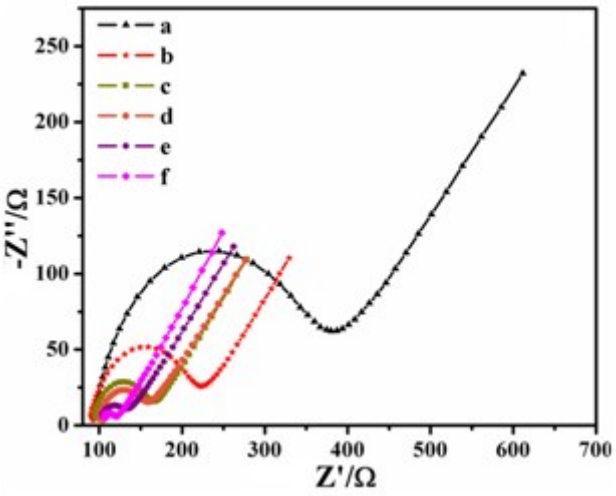

Figure S3: EIS of bare Au disc electrode (a), Au/chitosan/nafion/EP–MIP before extraction (b), Au/chitosan/nafion/EP–MIP after extraction of EP (c), Au/chitosan/nafion/EP–MIP/nafion before extraction (d), Au/chitosan/nafion/EP-MIP/nafion after extraction of EP (e), and Au/chitosan/nafion (f) coated electrodes respectively in 5 mmol L^{-1} $[Fe(CN)_6]^{3-/4-}$ solution containing 0.1 M KCl as a supporting electrolyte.

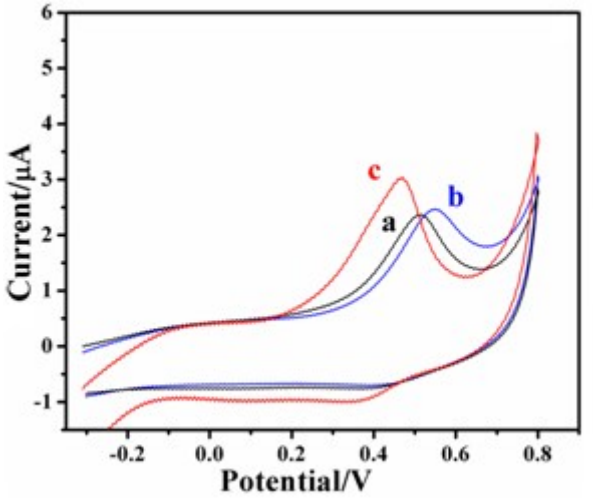

Figure S4: CVs recorded at EP–MIP modified Au disc electrode in 0.1 mol L^{-1} PBS (pH–7.0) blank solution (a), along with 200 µmol L^{-1} H_2O_2 (b), and in presence of 10 µmol L^{-1} EP (c).

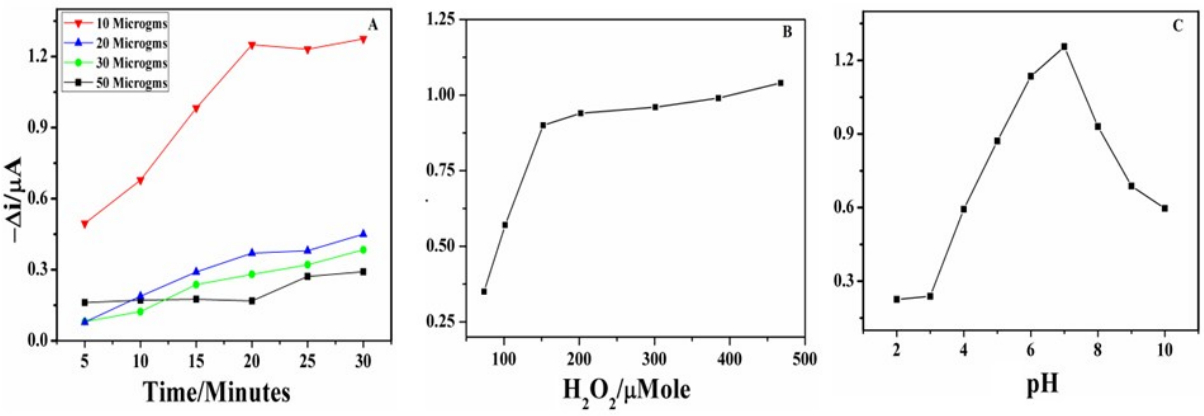

Figure S5: Influence of (A) loading 10, 20, 30 and 50 µg of MIP microspheres, (B) concentration of H_2O_2 and (C) pH of the medium on the variation of reduction current. Electrolyte: 0.1 mol L^{-1} PBS (pH–7.0) containing 200 µmol L^{-1} H_2O_2 at 10 µmol L^{-1} EP.

Table–S1:

Recovery studies of EP sensing in 25 times diluted human blood serum samples.

Samples	Added (µmol L^{-1})	Found (µmol L^{-1})	Recovery (%, n=3)
Serum Sample	--	ND	--
	2.50	2.84	113.6 (± 3.16)
	4.97	5.40	108.8 (± 4.35)
	9.89	10.36	104.75 (± 3.75)