Electronic Supplementary Material for RSC Advances

New Haptens Synthesis, Antibody Production and Comparative Molecular Field Analysis for Tetracyclines

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Electronic Supplementary Information(ESI)

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concentration and (D) the Ca^{2+} concentration on the heterologous-coating-antigen

ELISA for TC. The right-hand axes display the maximum absorbance (OD_{max}) values,

and the left axes display the IC_{50} values expressed in units of ng mL^{-1}. The

IC_{50}/OD_{max} values were used to select the optimal conditions for the ELISA.

Fig. S2 Calibration curves for the heterologous ELISA for tetracycline in PBS and in

PBS-diluted milk.

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Fig. S1 Influence of (A) the pH value, (B) the Triton concentration, (C) the salt concentration and (D) the Ca^{2+} concentration on the heterologous-coating-antigen ELISA for TC. The right-hand axes display the maximum absorbance (OD_{max}) values, and the left axes display the IC_{50} values expressed in units of ng mL^{-1}. The IC_{50}/OD_{max} values were used to select the optimal conditions for the ELISA.
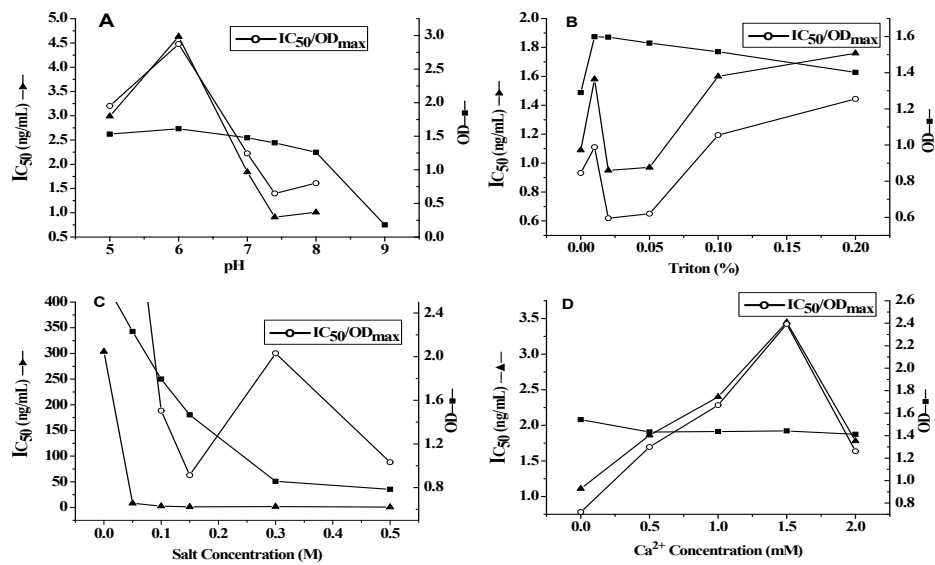
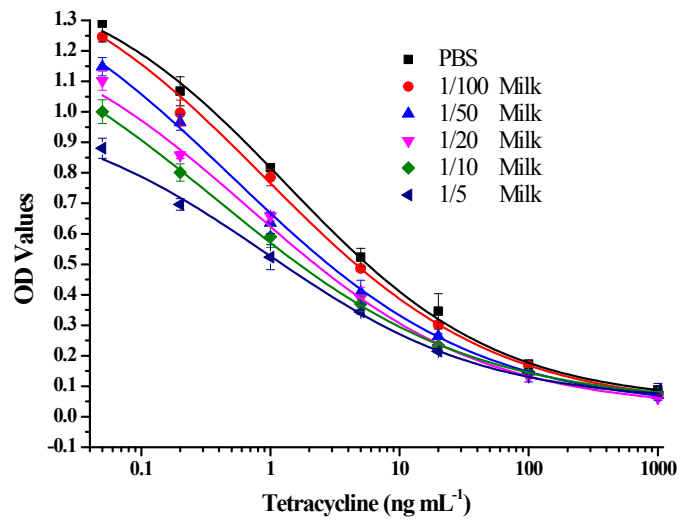**Fig. S2** Calibration curves for the heterologous ELISA for tetracycline in PBS and in PBS-diluted milk.

Table S1 Recoveries of TC in fortified milk ($\mu g\ L^{-1}$)

fortified	found	recovery (%)	intra-assay CV (%)	inter-assay CV (%)
100-fold-diluted milk				
50	55.9	111.8	12.5	14.5
100	106.3	106.3	10.4	13.4
200	169.8	84.9	7.62	9.34
50-fold-diluted milk				
50	67.2	134.4	13.2	15.2
100	127.3	127.3	11.3	12.4
200	176.4	88.2	7.4	8.4