

Electronic Supplementary Information (ESI)

Electrochemical behavior of eriocitrin and high sensitive determination based on the electrochemically reduced graphene oxide modified glassy carbon electrode

Shuyu Yao, Wanling Cai, Lin Liu, Xueqing Liao, Kaili Tao, Fang Feng* and Gongjun Yang*

Key Laboratory of Drug Quality Control and Pharmacovigilance (China Pharmaceutical University), Ministry of Education, School of Pharmacy, China Pharmaceutical University, Nanjing 210009, P. R. China

e-mail: gjyang@cpu.edu.cn, fengfang1@126.com

Fig. S1 Cyclic voltammograms of $0.5 \text{ mmol L}^{-1} \text{ Ru}(\text{NH}_3)_6^{2+/3+}$ (internal standard) in pH 7.0 PBS containing $0.1 \text{ mol L}^{-1} \text{ KCl}$ at ERGO (a) and bare GCE (b). Scan rate: 100 mV s^{-1} .

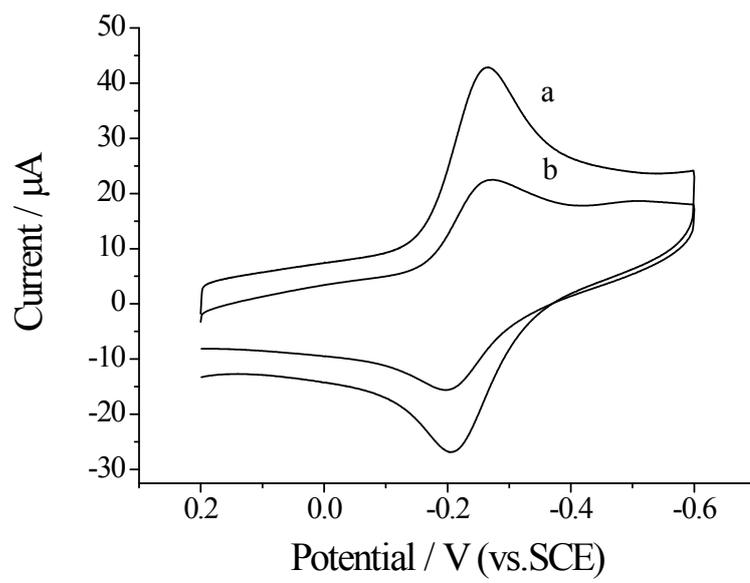


Fig. S2 The differential pulse voltammograms of 50.0 ng mL⁻¹ eriocitrin for the representative interference tests

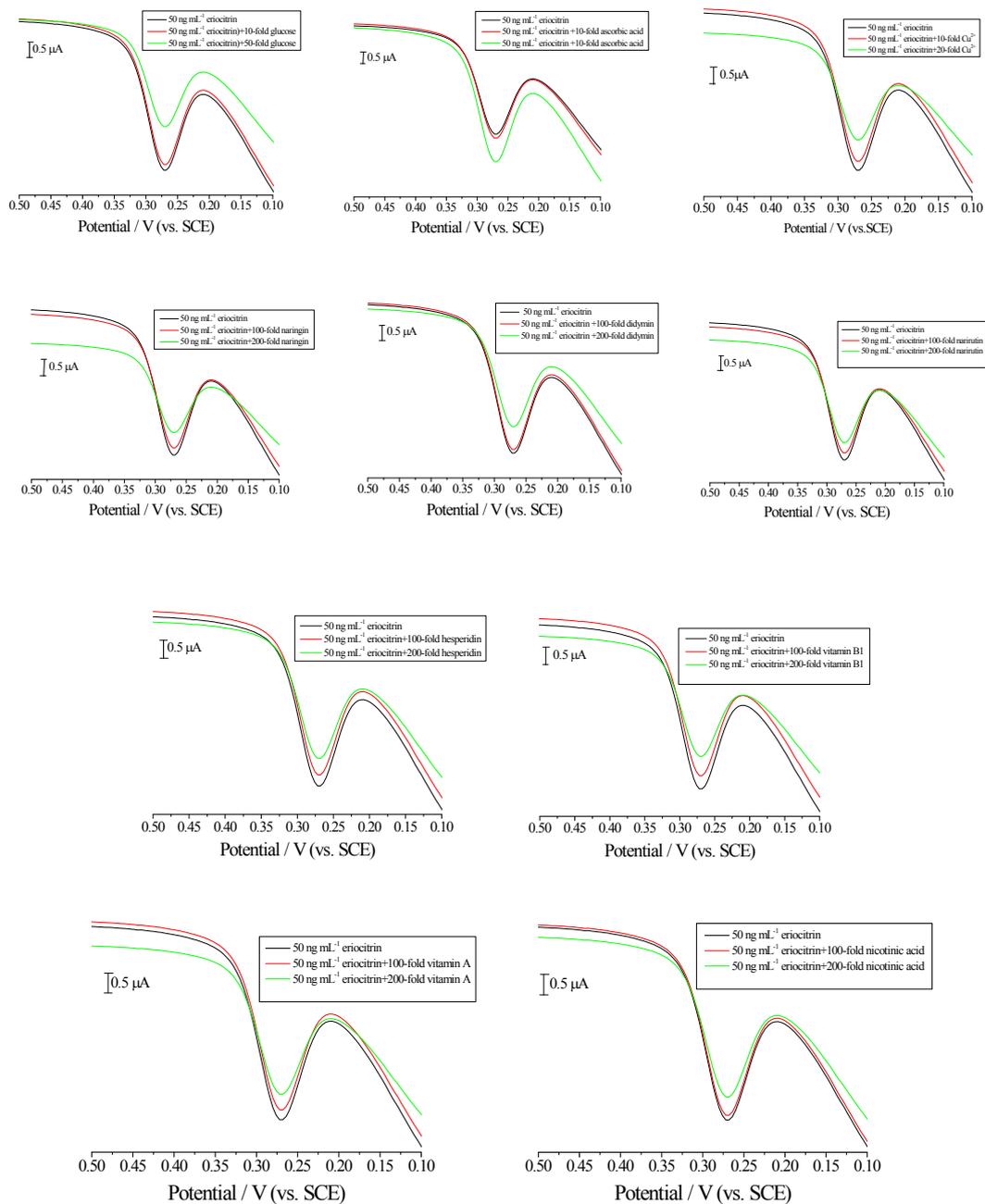


Table S1 The peak positions of characteristic bands and the $\frac{I_D}{I_G}$ ratio for the GO and

ERGO

	D-band (cm ⁻¹)	G-band (cm ⁻¹)	2D-band (cm ⁻¹)	(G+D)-band (cm ⁻¹)	2G-band (cm ⁻¹)	$\frac{I_D}{I_G}$ (%)
GO	1355.73	1603.24	2704.10	2951.38	3183.52	0.90
ERGO	1351.47	1600.48	2688.65	2947.94	3206.75	1.34

Table S2 De-convolution of the functional group percentages *via* XPS for GO and

ERGO.

	C=C/C-C at %	C-O at %	C=O at %	HO-C=O at %
GO	40.63	48.38	6.46	4.52
ERGO	61.01	36.12	1.50	1.37