

*Supplementary Materials*

# **Magnetic Solid-Phase Microextraction Protocol Based on Didodecyldimethylammonium Bromide-Functionalized Nanoparticles for the Quantification of Epirubicin in Biological Matrices**

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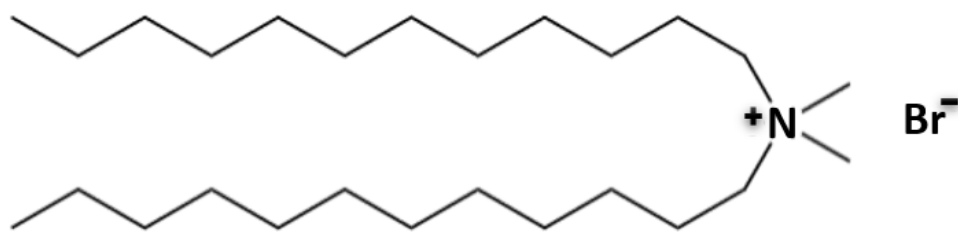
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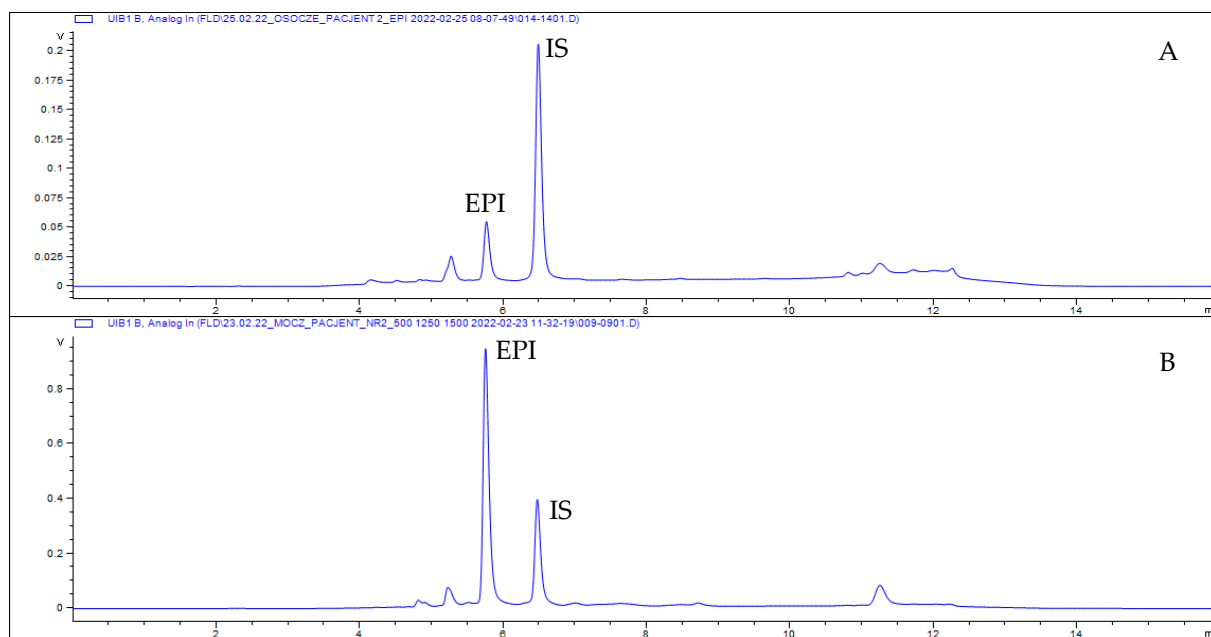
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**Figure S1.** Structure of didodecyldimethylammonium bromide



**Figure S2.** LC-FL chromatograms obtained for patient's plasma sample collected 2h after the end of the infusion (A) and for patient's urine samples collected in the range 4-8 h after the end of the infusion (B) (EPI dose: 150 mg/m<sup>2</sup>, first chemotherapy cycle).

**Table S1.** Stability of EPI in human plasma and urine samples under various experimental conditions (mean  $\pm$  SD, n = 3).

Storage conditions	Sample	Conc. added ( $\mu\text{g/mL}$ )	Precision RSD (%)	Accuracy (%)
Plasma				
Post-preparative storage (4°C, 24 h)	LQC	0.1	10.00	100
	MQC	0.5	11.11	90
	HQC	1.0	9.09	110
Ambient storage (4 h; short-thermal stability)	LQC	0.1	11.11	90
	MQC	0.5	10.00	100
	HQC	1.0	9.09	110
Long-term stability (-80°C, 2 months)	LQC	0.1	14.28	120
	MQC	0.5	14.28	101
	HQC	1.0	12.50	98
Three freeze-thaw cycles stability	LQC	0.1	14.28	120
	MQC	0.5	10.00	100
	HQC	1.0	11.11	110
Urine				
Post-preparative storage (4°C, 24 h)	LQC	0.5	5.77	104
	MQC	3.0	5.81	93
	HQC	7.5	6.93	100
Ambient storage (4 h; short-thermal stability)	LQC	0.5	6.38	94.
	MQC	3.0	6.19	108
	HQC	7.5	5.98	98
Long-term stability (-80°C, 2 months)	LQC	0.5	7.1	112
	MQC	3.0	8.43	110
	HQC	7.5	7.16	99
Three freeze-thaw cycles stability	LQC	0.5	7.2	96
	MQC	3.0	3.8	93
	HQC	7.5	3.4	98