

Supplementary Information

Polypyrrole-coated needle as an electrospray emitter for ambient mass spectrometry

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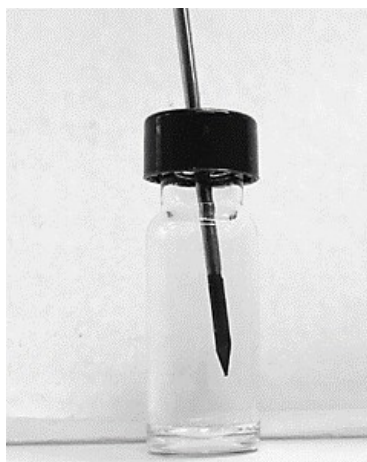


Fig. S1 PPy-coated needle (black coating onto the tip) inserted into a synthetic urine sample for the extraction of the analyte.



Fig. S2 Photos of the PPy-ESI-MS system.

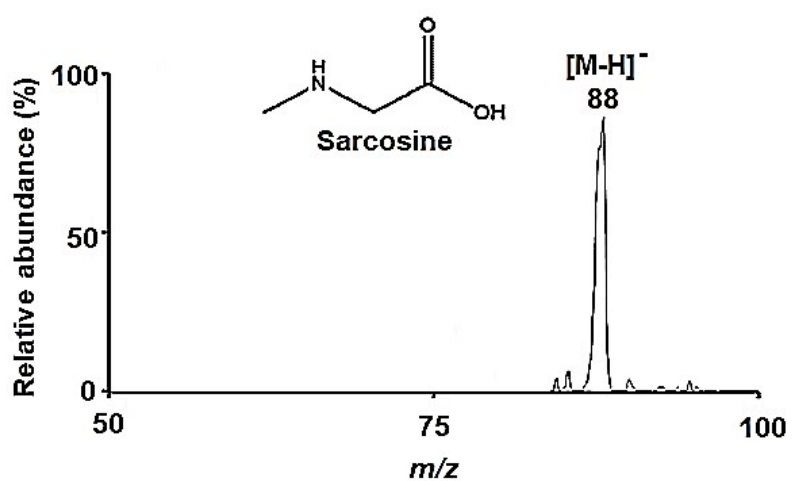


Fig. S3 Negative ion mode mass spectrum of sarcosine $[M-H]^-$ in synthetic urine obtained using the PPy-ESI-MS method.

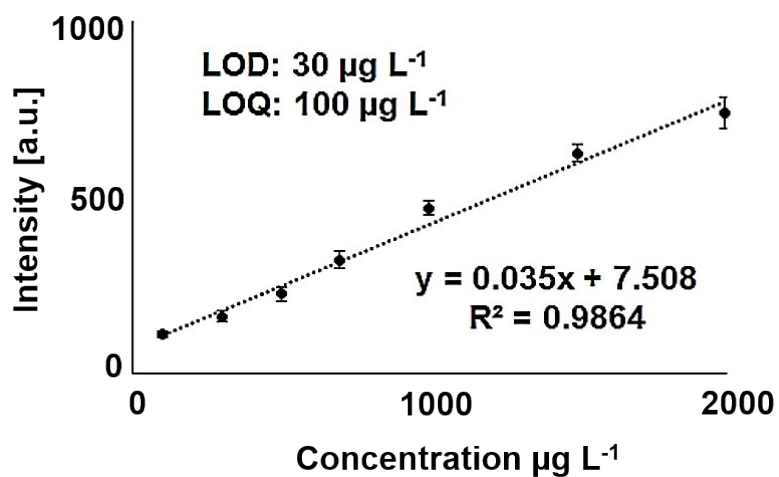


Fig. S4 Calibration curve of sarcosine at concentrations ranging from 100 to 2000 µg L⁻¹ obtained by PPy-ESI-MS analysis.

Table S1 Values of precision, accuracy, and recovery obtained from the analysis of sarcosine in synthetic urine by PPy-ESI-MS

Analyte	Concentration (µg L ⁻¹)	Intraday (n = 5)		Interday (n = 3)		Recovery (%)
		Precision (RSD ^a /%)	Accuracy (E ^b /%)	Precision (RSD ^a /%)	Accuracy (E ^b /%)	
Sarcosine	200	4.2	-7.5	4.8	-6.8	92.4
	800	3.6	-3.8	3.2	1.5	96.1
	1700	4.9	2.6	4.9	3.4	102.6

^aRelative standard deviation.

^bRelative error.