

Electronic Supporting Information

Forensic Electrochemistry: Indirect Electrochemical Sensing of the components of the New Psychoactive Substance “*Synthacaine*”

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Figure SI-1.

Presumptive test results for methiopropamine hydrochloride (MPA) and 2-AI hydrochloride (2-AI) reference standards after 5 minutes. Visualised under white light against negative control samples.

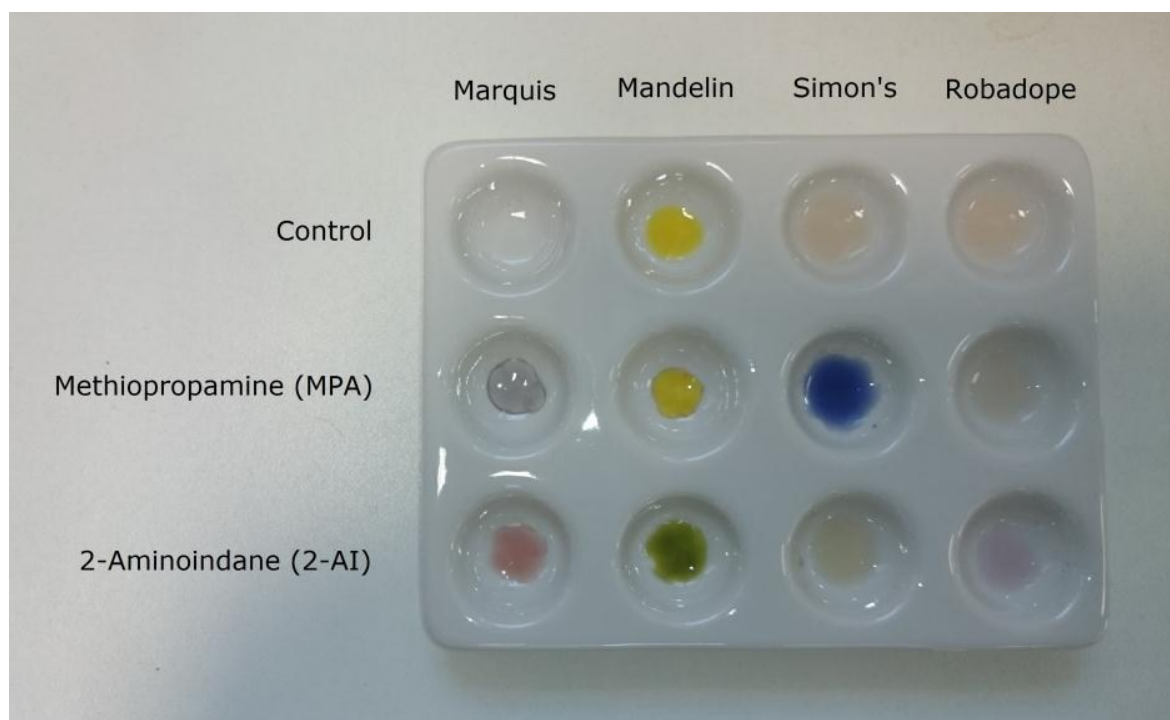


Figure SI-2.

Presumptive test results for street sample of “*Synthacaine*” containing methiopropamine hydrochloride (MPA) and 2-AI hydrochloride (2-AI) after 5 minutes. Visualised under white light. Note: The first row of wells is void/blank.

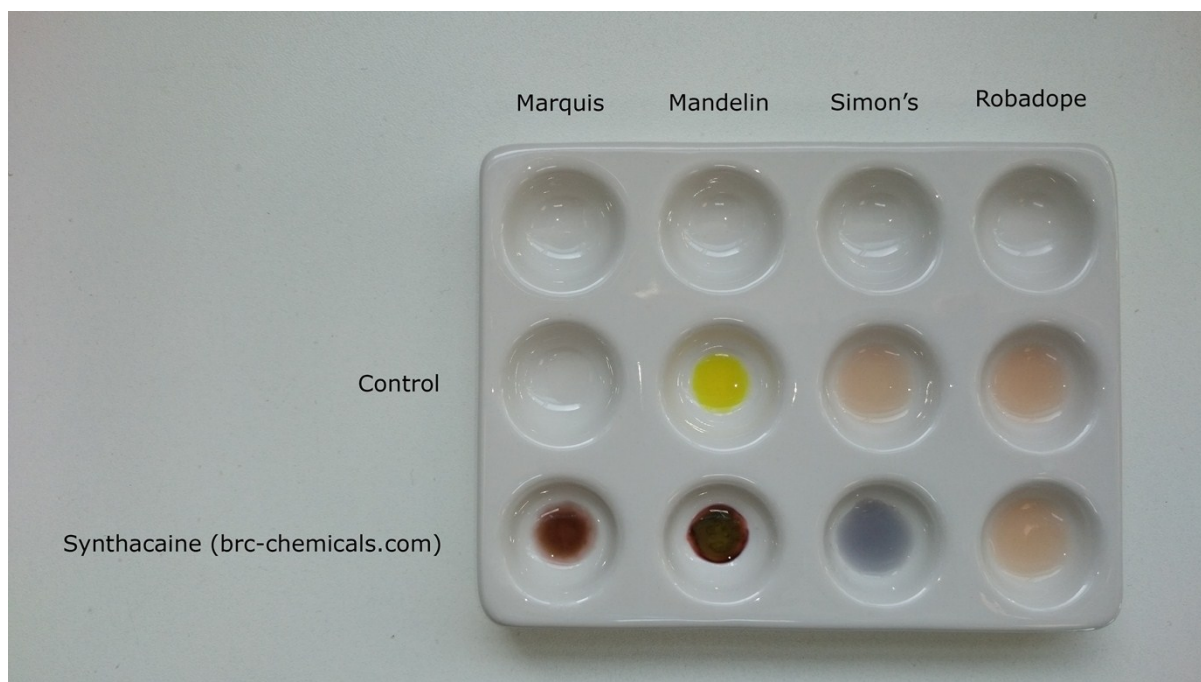


Figure SI-3.

Presumptive test results for mixtures of methiopropamine hydrochloride (MPA) and 2-AI hydrochloride (2-AI) after 5 minutes. Visualised under white light.

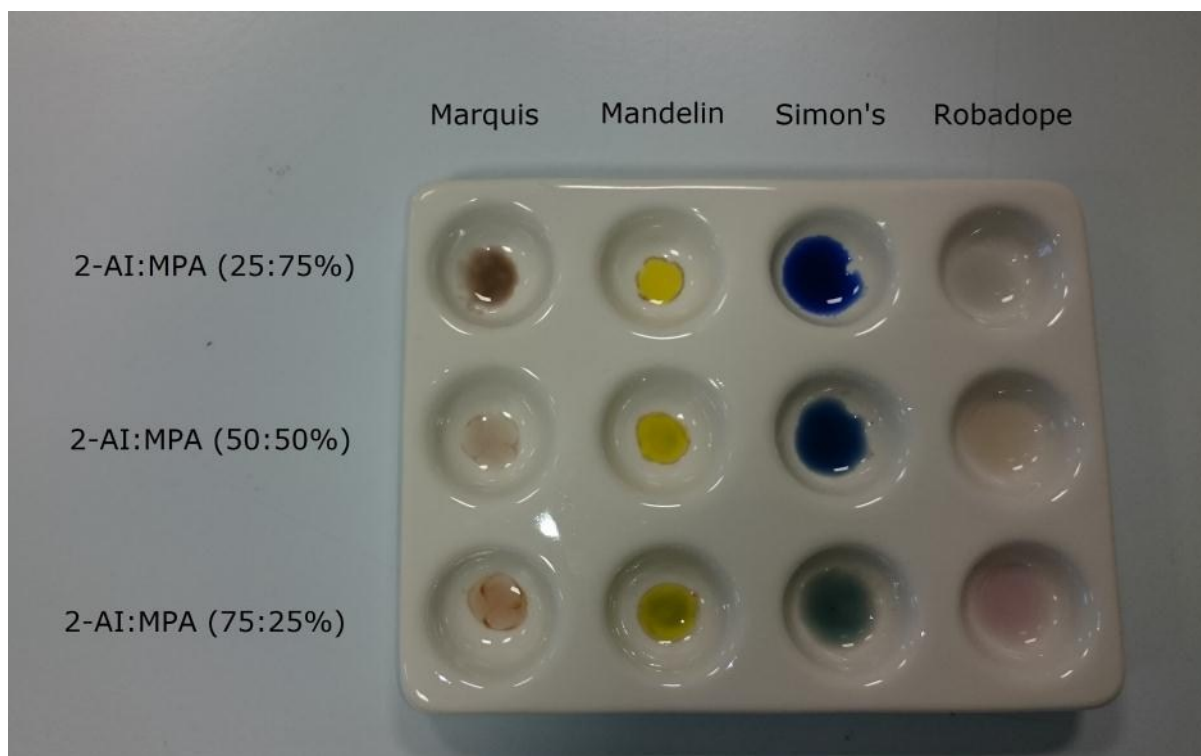


Figure SI-4. (a) ^1H NMR spectrum (400 MHz, $\text{DMSO}-d_6$) of 2-AI hydrochloride (2-AI) (10 mg/0.6 mL); (b) ^1H NMR spectrum (400 MHz, $\text{DMSO}-d_6$) of ($\pm$)-methiopropamine hydrochloride (MPA) (10 mg/0.6 mL) and (c) ^1H NMR spectrum (400 MHz, $\text{DMSO}-d_6$) of purchased sample of “Synthacaine” (10 mg/0.6 mL). All samples were recorded at ambient temperature and filtered prior to analysis.

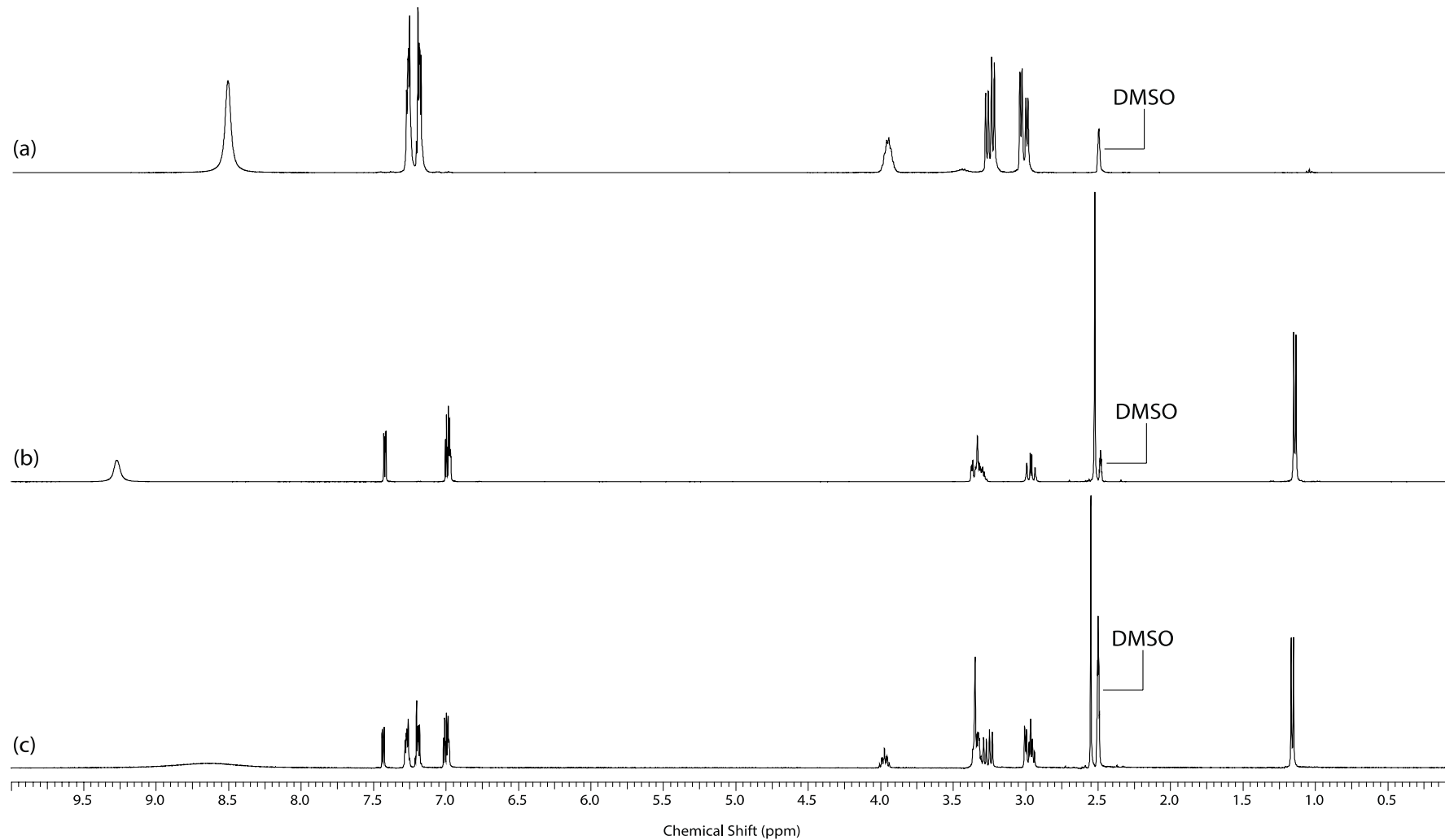


Figure SI-5.

Raman spectra of the **A:** 2-AI, **B:** MPA and **C:** (a) 50% w/w of MPA + 50%w/w of 2-AI, (b) 75%w/w of MPA + 25%w/w of 2-AI and (c) 25%w/w of MPA + 75%w/w of 2-AI.

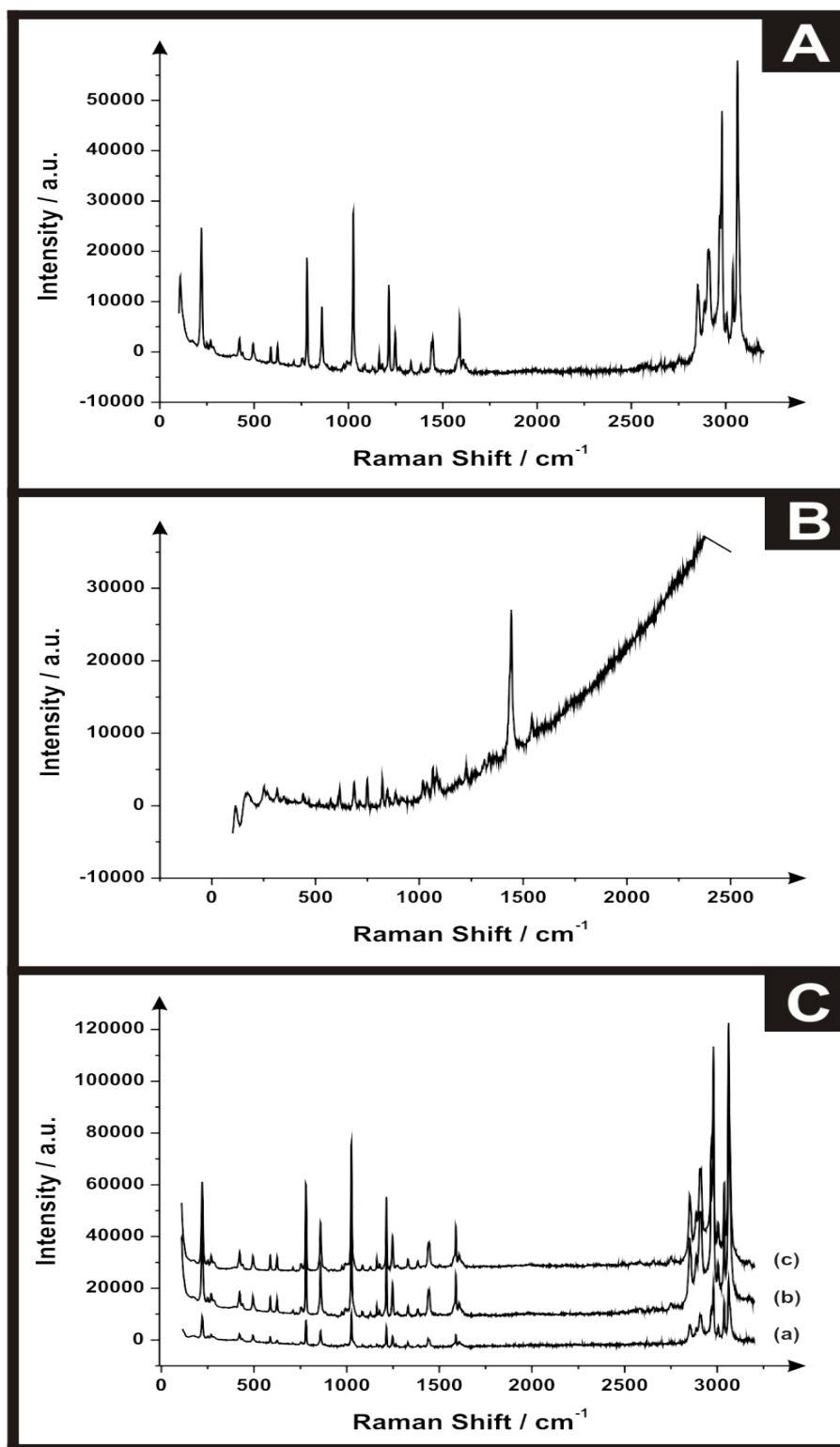


Figure SI-6.

Cyclic voltammograms of the *direct* detection of: (A) MPA and (B) 2-AI (scan rate: 100 mV s⁻¹ vs. Ag/AgCl); the dotted line represents a blank.

