## **Supporting Information**

## for

## Multiplexed detection of metabolites of narcotic drugs from a single latent fingermark

Pompi Hazarika, <sup>1</sup> Sue M. Jickells, <sup>2</sup> Kim Wolff, <sup>3</sup> and David A. Russell\* <sup>1</sup>

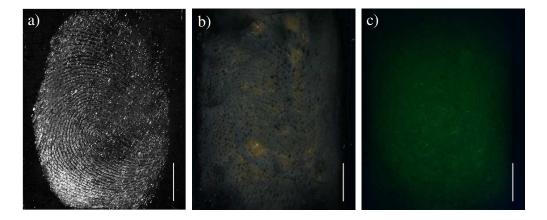
\*E-mail: <u>d.russell@uea.ac.uk</u>

Current address: Centre for Staff and Educational Development, University of East Anglia, Norwich, Norfolk, NR4 7TJ (UK)

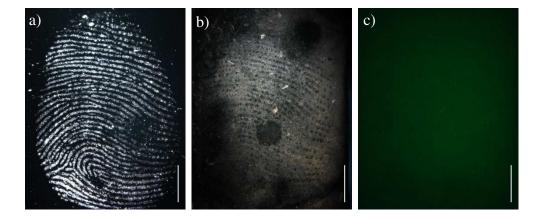
<sup>&</sup>lt;sup>1</sup> Dr P. Hazarika, Professor D. A. Russell, School of Chemistry, University of East Anglia, Norwich, Norfolk, NR4 7TJ (UK)

<sup>&</sup>lt;sup>2</sup> Dr S. M. Jickells, Department of Forensic Science and Drug Monitoring, King's College London, Franklin-Wilkins Building, 150 Stamford Street, London, SE1 9NH (UK)

<sup>&</sup>lt;sup>3</sup> Dr K. Wolff, King's College London, Institute of Psychiatry, Addiction Department, 4 Windsor Walk, Denmark Hill, London, SE5 8AF (UK)



**Figure S1**: Negative control experiment for the detection of morphine in the fingermark from a volunteer who was not taking any narcotic drugs. (a) and (b) are brightfield images of a fingermark before and after incubation of the anti-morphine antibody functionalized magnetic particles and Alexa Fluor 488 dye tagged secondary antibody fragments on the fingermark. (c) shows the fluorescence image of the fingermark following incubation of the reagents used in (b). Scale bars are 5 mm.



**Figure S2**: Negative control experiment for the detection of benzoylecgonine in the fingermark from a volunteer who was not taking any narcotic drugs. (a) and (b) are brightfield images of a fingermark before and after incubation of the anti-benzoylecgonine antibody functionalized magnetic particles and Alexa Fluor 488 dye tagged secondary antibody fragments on the fingermark. (c) shows the fluorescence image of the fingermark following incubation of the reagents used in (b). Scale bars are 5 mm.