

Electronic Supplementary Information (ESI) for Determination of amphetamine-type stimulants, cocaine and ketamine in human hair by liquid chromatography/linear ion trap- Orbitrap hybrid mass spectrometry

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Table S1. Recovery during filtration with a Ultrafree MC filter unit.

Compound	Recovery ^a (%)	
	0.1 mmol L ⁻¹ HCOONH ₄ (pH 3.5)	0.1 mmol L ⁻¹ HCOONH ₄ (pH 3.5)–acetonitrile (9:1, v/v)
AP	106.3	60.8
MA	106.8	63.2
DMA	91.9	39.6
MDA	105.5	60.0
MDMA	84.5	63.0
KET	96.1	60.7
NK	109.2	69.5
COC	47.8	5.9
BE	109.5	77.6

^a The ratio of the peak area before and after filtration, $n = 2$. Initial concentration of each analyte was 1 ng mL⁻¹ and the injection volume was 20 µL.

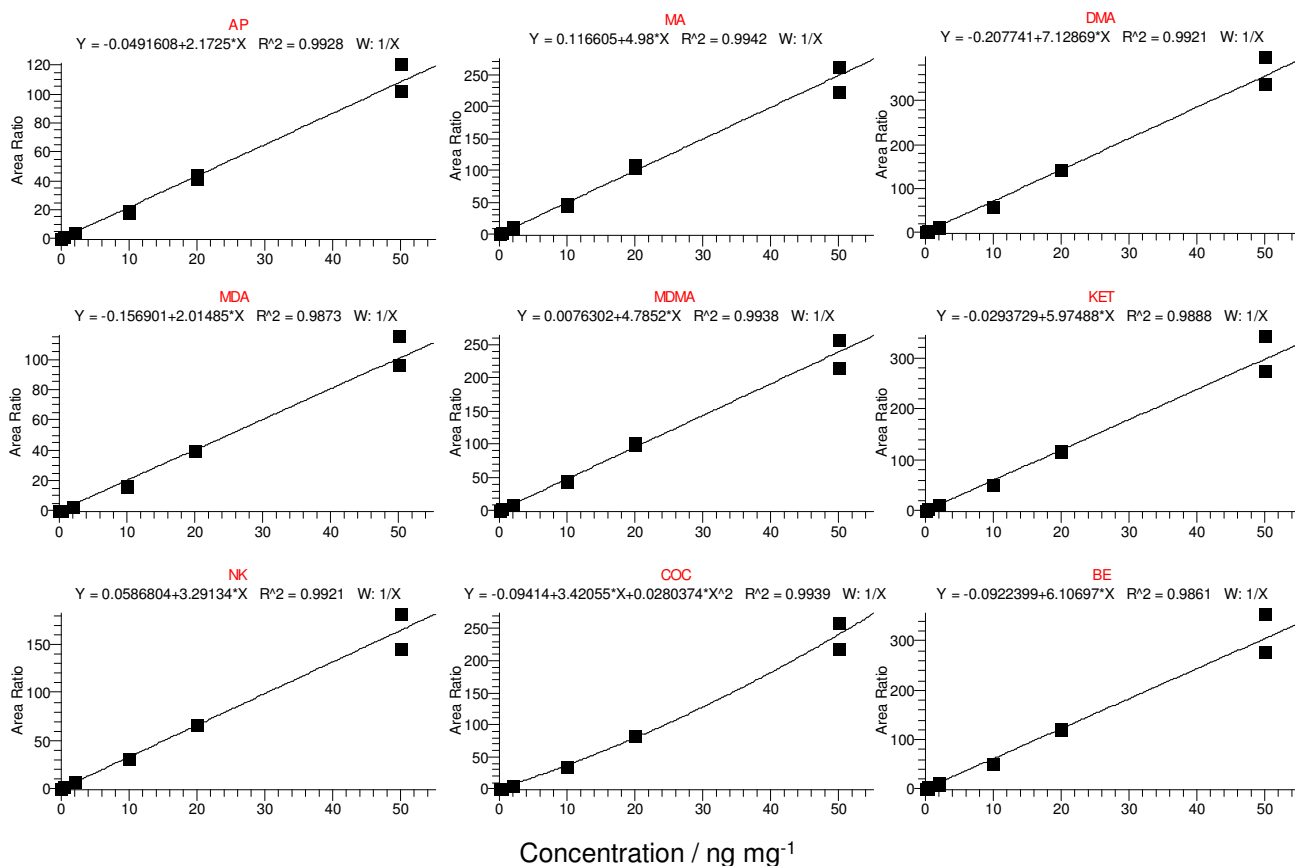


Fig. S1. Calibration curves of the analytes. AP, amphetamine; MA, methamphetamine; DMA, dimethylamphetamine; MDA, 3,4-methylenedioxymphetamine; MDMA, 3,4-methylenedioxymethamphetamine; KET, ketamine; NK, norketamine; COC, cocaine; BE, benzoylecgonine.

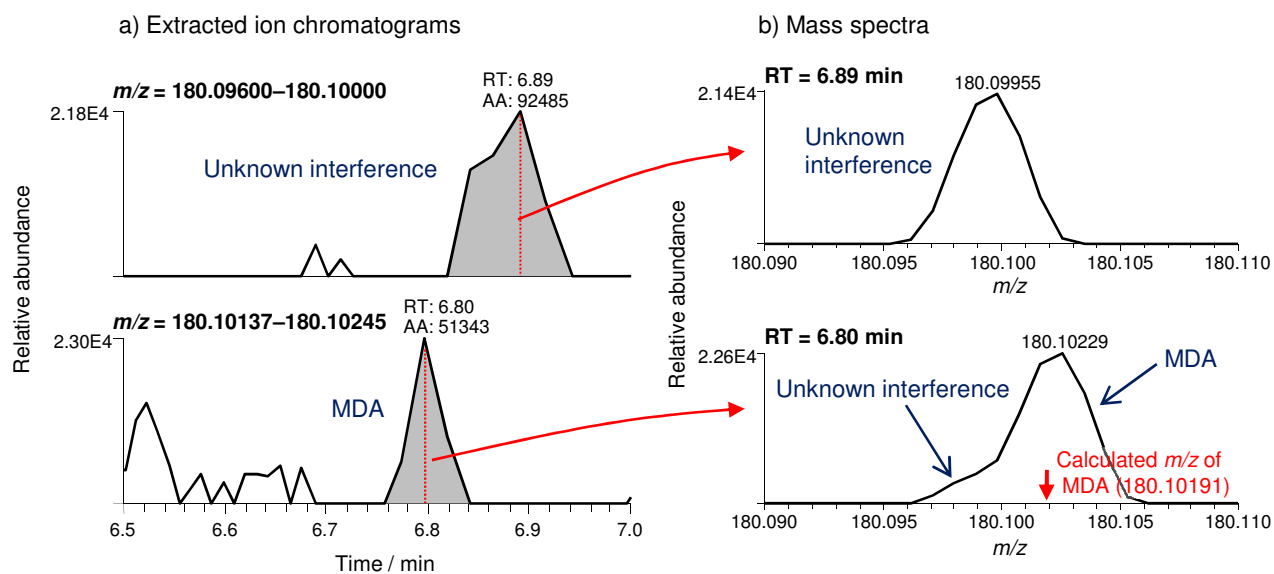


Fig. S2. Enlarged extracted ion chromatograms (a) and mass spectra (b) acquired by full-scan analysis with the Orbitrap analyzer, derived from a hair sample spiked with each analyte at 50 pg mg⁻¹.