

质谱在石油化工、环境保护、产品质量等领域中的应用

SPME顶空衍生气质联用法检测头发中蛋白同化激素

邱丽君; 刘薇; 陈国南; 张兰

福州大学, 食品安全分析与检测教育部重点实验室, 福建 福州 350002

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摘要

关键词

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Determination of Anabolic Steroids in Human Hair by Solid-Phase Microextraction with Headspace Derivatization and Gas Chromatography Mass Spectrometry

QIU Li-jun, LIU Wei, CHEN Guo-nan, ZHANG Lan

Ministry of Education Key Laboratory of Analysis and Detection for Food Safety, Fuzhou University, Fuzhou 350002, China

Abstract The method for extraction and determination of androsterone, 5α -androstane- $3\alpha,17\beta$ -diol, epiandrosterone and 5α -androstane- $3\beta,17\beta$ -diol were developed by SPME with headspace derivatization and GC/MS. It was applied to the simultaneous analysis of 4 anabolic steroids in the spiked human hair with the satisfactory accuracy and precision. The limits of detection(S/N=3) for 4 anabolic steroids in spiked human hair are in the range of 0.027 - $0.150\mu\text{g L}^{-1}$.

Key words [solid-phase](#) [microextraction](#) [derivatization](#) [gas chromatography](#) [mass spectrometry](#) [anabolic](#) [steroids](#)

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