

Identification of PB-22 and PB-22F cannabimimetics markers in urine by GC-MS

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Abstract

Markers allowing to determine the fact PB-22 and PB-22F cannabimimetics being used in urine screening procedure by methods of solid-phase extraction and gas chromatography-mass spectrometry have been described. Identification of 1-pentyl-1*H*-indole-3-carboxylic and 1-(5-fluoropentyl)-1*H*-indole-3-carboxylic acids in the urine of smoking mixtures consumers containing cannabimimetics PB-22 and PB-22F was conducted. It has been found out that the metabolism of PB-22 and PB-22F passes through the rupture of ester bond, the main metabolites PB-22 and PB-22F being excreted with urine in the conjugated form. Gas chromatographic and mass spectrometric data of some derivatives of 1-pentyl-1*H*-indole-3-carboxylic and 1-(5-fluoropentyl)-1*H*-indole-3-carboxylic acids are presented that may be useful in the practice of forensic chemical and chemical-toxicological analysis.