

Journal of Analytical Chemistry 2003 vol.58 N8, pages 755-761

Gas Chromatographic Determination of Diacetylmorphine with Mass Spectrometric Detection

Fitsev I., Budnikov G., Blokhin V., Teslenko P.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The possibility of determining diacetylmorphine traces in various matrices by gas chromatography with mass spectrometric detection is demonstrated. Diacetylmorphine can be reliably determined by gas chromatography-mass spectrometry in the range 0.02-7.5 µg/mL. A procedure is developed for the quantitative determination of diacetylmorphine and its concomitants, including acetylated opioid derivatives, in forensic samples. The detection limit for diacetylmorphine without preconcentration is 0.01 µg/mL. The detection limit in the selective-ion monitoring mode with preconcentration is 1×10^{-4} µg/mL.

<http://dx.doi.org/10.1023/A:1025087627804>
