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ABSTRACT

The recent growing interest in primary fatty acid amides (PFAMs) is due to the broad range of physiological effects they exhibit as bioindicators of pathological states. These bioactive lipids are usually in biological samples at the nanomolar level, making their detection and identification a challenging task. A method for quantitative analysis of seven main PFAMs (lauramide, myristamide, linoleamide, palmitamide, oleamide, stearamide and behenamide) in four human biofluids —namely, urine, plasma, saliva and sweat— is here reported. Two sample preparation procedures were compared to test their efficiency in each biofluid: solid-phase extraction (SPE) and protein precipitation. The latter was the best for plasma and urine, while the analysis of saliva and sweat