www.elsevier.com/locate/talanta

Concerted derivatization and concentration method with dispersive liquid-liquid microextraction for liquid chromatographic analysis of 5-hydroxyindoles in human serum

Tadashi Hayama, Yurika Yabuuchi, Tomomi Iwamatsu, Erina Tamashima, Yusuke Kawami, Miki Itoyama, Hideyuki Yoshida, Masatoshi Yamaguchi, Hitoshi Nohta

PII: S0039-9140(13)00693-0
DOI: http://dx.doi.org/10.1016/j.talanta.2013.08.035
Reference: TAL14138

To appear in: *Talanta*

Received date: 28 June 2013
Revised date: 22 August 2013
Accepted date: 22 August 2013

Cite this article as: Tadashi Hayama, Yurika Yabuuchi, Tomomi Iwamatsu, Erina Tamashima, Yusuke Kawami, Miki Itoyama, Hideyuki Yoshida, Masatoshi Yamaguchi, Hitoshi Nohta, Concerted derivatization and concentration method with dispersive liquid-liquid microextraction for liquid chromatographic analysis of 5-hydroxyindoles in human serum, *Talanta,* http://dx.doi.org/10.1016/j.talanta.2013.08.035

Concerted derivatization and concentration method with dispersive liquid-liquid microextraction for liquid chromatographic analysis of 5-hydroxyindoles in human serum

Tadashi Hayama, Yurika Yabuuchi, Tomomi Iwamatsu, Erina Tamashima, Yusuke Kawami, Miki Itoyama, Hideyuki Yoshida, Masatoshi Yamaguchi, Hitoshi Nohta*

Faculty of Pharmaceutical Sciences, Fukuoka University, 8-19-1 Nanakuma, Johnan, Fukuoka 814-0180, Japan

* Corresponding author.

Fax: +81-92-863-0389

E-mail: nohta@fukuoka-u.ac.jp

Abstract

We developed a concerted derivatization and concentration method based on dispersive liquid-liquid microextraction (DLLME) for the liquid chromatography (LC) determination of 5-hydroxyindoles (5-HIs; serotonin, 5-hydroxyindole-3-acetic acid, *N*-acetylserotonin, and 5-hydroxytryptohol). Concerted derivatization and concentration