Turkish Journal of Chemistry

Turkish Journal

of

Chemistry

# Synthesis of 2-[2-(3,4,5-Trimethoxybenzoyloxy)ethyl]pyrrolidine Hydrochloride Controlled by GC-MS, $^{1}H$ and $^{13}C$ NMR Analyses

Alicja WODNICKA, Maygorzata DZIECIOL
Institute of Organic Chemical Technology, Szczecin University of Technology
Al. Piastów 42, 71-065 Szczecin-POLAND
e-mail: awodnicka@ps.pl

Keywords
Authors

**Abstract:** The synthesis of 2-[2-(3,4,5-trimethoxybenzoyloxy)ethyl]pyrrolidine hydrochloride was performed using 2-(2-hydroxyethyl)pyrrolidine as a starting material. Before the O-acylation reaction with 3,4,5-trimethoxybenzoyl chloride, the amino group was protected using benzyl chlorocarbonate. The removal of the blocking group was carried out in modified conditions, avoiding the alcoholysis of the ester bond. The final product was separated from its structural isomer by precipitation as its hydrochloride salt. Some steps of the synthesis were controlled by GC-MS. The identification of the respective compounds was performed by mass spectra analyses and confirmed by $^{1}H$ NMR, $^{13}C$ NMR, IR and elemental analyses.

**Key Words:** 2-[2-(3,4,5-trimethoxybenzoyloxy)ethyl]pyrrolidine hydrochloride, pyrrolidine derivatives, O-acylation of amino alcohols, removal of Cbz group

chem@tubitak.gov.tr

Scientific Journals Home Page

---

Turk. J. Chem., **29**, (2005), 641-646.
Full text: pdf
Other articles published in the same issue: Turk. J. Chem.,vol.29,iss.6.