

论文

胶束色谱分析黄连及含黄连中成药中小檗碱型生物碱的研究

邱晓星;伍朝笈;陈柏林

华西医科大学药学院,成都; \*中国科学院成都分院分析测试中心,现在地址 北京医科大学药学院分析教研室

摘要:

本文报道用胶束色谱法分离测定黄连(黄柏)及含黄连(黄柏)中成药中黄连碱、药根碱、巴马亭和小檗碱。考察了固定相、胶束浓度、有机改性剂浓度及pH对组分保留行为的影响。实验结果表明;影响该色谱分离的主要因素为固定相极性和胶束浓度。同时在胶束流动相中加入甲醇改性剂,可在室温下显著地提高柱效。用键合苯基固定相,以3.5%十二烷基硫酸钠/0.1 N酒石酸-甲醇(30:70)胶束溶液作流动相,测定了十几种黄连(黄柏)及含黄连(黄柏)的中成药。

关键词: 胶束色谱 黄连 黄柏 中成药 黄连碱 巴马亭 药根碱 小檗碱

ANALYSIS OF BERBERINE-TYPE ALKALOIDS IN RHIZOMA COPTIDIS AND CHINESE PATENT MEDICINES BY MICELLAR CHROMATOGRAPHY

QIU Xiao-Xing; WU Chao-Yun and CHEN Bai-Lin

Abstract:

Micellar chromatography was chosen for the separation of coptisine, jatrorrhizine, palmatine and berberine. Several factors affecting the separation selectivity of solutes—stationary phase, concentration of micelle, ratio of organic modifier and pH—were investigated. Experimental evidences indicate: the main effective factors are the polarity of stationary phase and the concentration of micelle. At room temperature, the efficiency of micellar chromatography can be improved only by adding methanol into the mobile phase. A reversed-phase system of μ-Bondapakphenyl column with a micellar solution of 3.5% sodium dodecyl sulfate/0.1 N tartaric acid-methanol (30:70) as mobile phase was used to determine coptisine, jatrorrhizine, palmatine and berberine in 8 rhizoma Coptidis and cortex Phellodendri and in 8 Chinese patent medicines.

Keywords: Rhizoma Coptidis Cortex Phellodendri Chinese patent medicine Coptisine Palmatine Jatrorrhizine Berberine Micellar chromatography

收稿日期 1985-09-04 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者:

作者简介:

参考文献:

本刊中的类似文章

1. 张然;袁从英;王素敏.新技术拟相生物色谱法研究进展[J]. 药学报, 2008,43(5): 443-449
2. 晁若冰;伍朝笈.胶束色谱法分析莨菪生药中托烷生物碱的研究[J]. 药学报, 1991,26(7): 519-526
3. 黄铁民;俞永祥.胺类药物的胶束色谱研究[J]. 药学报, 1990,25(12): 910-915
4. 毛晶晶;孙进;何仲贵.生物分配胶束色谱用于评价药物膜转运及其活性[J]. 药学报, 2005,40(10): 865-870

扩展功能

本文信息

- ▶ Supporting info
- ▶ PDF(477KB)
- ▶ [HTML全文]
- ▶ 参考文献

服务与反馈

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ 引用本文
- ▶ Email Alert
- ▶ 文章反馈
- ▶ 浏览反馈信息

本文关键词相关文章

- ▶ 胶束色谱
- ▶ 黄连
- ▶ 黄柏
- ▶ 中成药
- ▶ 黄连碱
- ▶ 巴马亭
- ▶ 药根碱
- ▶ 小檗碱

本文作者相关文章

- ▶ 邱晓星
- ▶ 伍朝笈
- ▶ 陈柏林

PubMed

- ▶ Article by
- ▶ Article by
- ▶ Article by

反馈人	<input type="text"/>	邮箱地址	<input type="text"/>
反馈标题	<input type="text"/>	验证码	<input type="text"/> 7726