

论文

丹参中丹参酮II_A的SFE-CGC法测定

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1.第二军医大学药学院; 2.第二军医大学基础医学部, 上海 200433

摘要:

目的 用超临界流体萃取法(SFE)联用毛细管气相色谱法(CGC)测定丹参药材中丹参酮II_A的含量。方法 用溶解度参数理论预测丹参酮II_A的溶解压力,再用正交设计法考察温度、改性剂量和动态萃取体积三因素对SFE萃取效率的影响。结果 SFE-CGC法测定丹参药材中丹参酮II_A简便快速,结果准确可靠,加样回收率为95.3%,RSD=4.3%,n=3。结论 利用SFE-CGC法测定丹参药材中丹参酮II_A,可提高分析速度,且使用有机溶剂少,对环境造成的污染小,与超声提取法比较,经t检验,显著优于超声提取法。

关键词: 超临界流体萃取 丹参酮II_A 丹参 毛细管气相色谱法

SFE-CGC DETERMINATION OF TANSHINONE IN SALVIA MILTIORRHIZA BUNGE

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Abstract:

AIM To analyze tanshinone II_A in *Salvia miltiorrhiza* Bunge by supercritical fluid extraction (SFE) coupled with capillary gas chromatography (CGC). METHODS The solution pressure was predicted by solubility parameter theory, the extraction conditions were confirmed by orthogonal design in which temperature, volume of modifier and dynamic extracting volume had been studied in three levels. RESULTS This method is quick, convenient, precise and accurate, added sample recovery is 95.3%, RSD=4.27%. CONCLUSION Compared with the method of ultrasonic extraction, significantly better qualitative and quantitative result could be obtained by SFE-CGC and expend less organic solvent then make less pollution.

Keywords: supercritical fluid extraction tanshinone II_A *Salvia miltiorrhiza* capillary gas chromatography

收稿日期 2000-06-12 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者:

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