

论文

一支箭中抗胃溃疡的倍半萜内酯苷

吴少华;罗晓东;马云保;郝小江;吴大刚

中国科学院昆明植物研究所植物化学开放研究实验室, 云南 昆明 650204

摘要:

目的研究一支箭(Crepis napifera (Franch.) Babc.)根中抗胃溃疡的活性成分。方法采用柱色谱方法进行分离纯化,得到2个化合物,用NMR,MS,UV,IR光谱技术和化学方法进行鉴定;测定化合物1对大鼠体内由阿司匹林导致胃损伤的影响和对胃酸分泌的作用。结果分离得到2个倍半萜内酯苷类化合物,taraxinic acid-1'-O-β-D-glucoopyranoside (1)和11,13-dihydro-taraxinic acid-1'-O-β-D-glucoopyranoside (2)。化合物1以80 mg·kg<sup>-1</sup>的剂量ig给药,可以有效地抑制鼠体内由于阿司匹林导致的胃损伤,并以70 mg·kg<sup>-1</sup>的剂量iv不会影响鼠体内由组胺刺激产生的胃酸分泌物。结论化合物1为保护胃粘膜,抗胃溃疡的活性成分。

关键词: 一支箭 倍半萜内酯苷 胃粘膜 胃溃疡 阿司匹林 组胺

ANTI-GASTRIC ULCER SESQUI TERPENE LACTONE GLYCOSIDES FROM CREPIS NAPIFERA

WU Shao-hua; LUO Xiao-dong; MA Yun-bao; HAO Xiao-jiang; WU Da-gang

Abstract:

AIMThe anti-gastric ulcer constituents from the roots of Crepis napifera (Franch) Babc (Compositae) were studied. METHODSSolvent partition, Si gel and Rp-18 column chromatography, crystallization and spectral methods were used to extract, isolate and identify two compounds. The activity of compound 1 was tested on the mouse stomach by determining the effect on aspirin-induced gastric lesions and on histamine-stimulated gastric acid secretion. RESULTSTwo sesquiterpene lactone glycosides, taraxinic acid-1'-O-β-D-glucoopyranoside (1) and 11,13-dihydro-taraxinic acid-1'-O-β-D-glucoopyranoside (2) were obtained. Compound 1 at the dose of 80 mg·kg<sup>-1</sup> po inhibited significantly the development of aspirin-induced gastric lesions in the rat and at an iv dose of 70 mg·kg<sup>-1</sup> did not affect histamine-stimulated gastric acid secretion in the lumen-perfused rat stomach. CONCLUSIONCompound 1 is the active component of the plant which protects gastric mucosa and exhibits anti-gastric ulcer action.

Keywords: sesquiterpene lactone glycoside gastric mucosal gastric ulcer aspirin histamine Crepis napifera

收稿日期 2001-06-05 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者: 罗晓东

作者简介:

参考文献:

本刊中的类似文章

文章评论 (请注意:本站实行文责自负, 请不要发表与学术无关的内容!评论内容不代表本站观点.)

扩展功能

本文信息

- ▶ Supporting info
- ▶ PDF(143KB)
- ▶ [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

- ▶ 一支箭
- ▶ 倍半萜内酯苷
- ▶ 胃粘膜
- ▶ 胃溃疡
- ▶ 阿司匹林
- ▶ 组胺

本文作者相关文章

- ▶ 吴少华
- ▶ 罗晓东
- ▶ 马云保
- ▶ 郝小江
- ▶ 吴大刚

PubMed

- ▶ Article by
- ▶ Article by
- ▶ 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" value="3357"/>