

论文

阿克拉霉素A聚氰基丙烯酸异丁酯毫微粒冻干针剂体内外抗肝癌活性

蒋学华;廖工铁;黄光琦;白绍槐;袁淑兰张旋波

成都华西医科大学药学院,成都 610041 **华西医科大学肿瘤研究所,***华西医科大学实验动物中心

摘要:

阿克拉霉素A聚氰基丙烯酸异丁酯毫微粒的冻干针剂,能明显抑制体外培养人肝癌细胞株7703的生长,IC50为0.28μg·ml⁻¹。在0.8μg·ml⁻¹浓度时,克隆形成抑制率为90%,抑制作用有明显剂量依赖关系而未见明显时间依赖关系。静脉给药后,对常位移植人肝癌模型裸小鼠的抑瘤率为86.84%,肿瘤细胞增殖活性阳性率为20.83%。体内外均显示明显的抗肝癌活性,且体内抗肝癌活性比阿克拉霉素A冻干针剂强。

关键词: 阿克拉霉素A 毫微粒 抗癌活性

HE ANTIHEPATOMA EFFECT OF LYOPHILIZED ACLACINOMYCIN A POLYISOBUTYLCYANOACRYLATE NANOPARTICLES IN VITRO AND IN VIVO

XH Jiang;GT Liao;GQ Huang;SH Bai;SL Yuan and XB Zhang

Abstract:

This paper reports the results of experiments on the antihepatoma effects of live targeted drug delivery system—lyophilized aclacinomycin A polyisobutylcyanoacrylate nanoparticle(ACM-IBC-NP)in vitro and in vivo. The median inhibition concentration were found to be 0.28 μg·ml⁻¹ and 0.34μg·ml⁻¹ of lyophilized ACM-IBC-NP and ACM respectively in vitro. The inhibition ratio of colony formation were found to be 99%and 88%of lyophilized ACM-IBC-NP and ACM respectively *in vitro*,The antihepatoma activity was shown to be significantly concentration dependent.The results showed that lyophilized ACM-IBC-NP and ACM possess strong cytotoxicity on human hepatoma cell 7703,and the cytotoxicity was not significantly different between lyophilized ACM-IBC-NP and ACM *in vitro*. The model of orthotopic transplantation of human hepatoma in nude mice were used for evaluation of the activity of lyophilized ACM-IBC-NP against hepatoma. The tumor inhibition rate were found to be 86.84%for lyophilized ACM-IBC-NP and 46.69%for ACM. The cell proliferative activity of hepatoma were found to be 20.83%by lyophilized ACM-IBC-NP and 72.50%by ACM;All the results indicate that lyophilized ACM-IBC-NP and ACM have clinical application potential and the antihepatoma activity of lyophilized ACM-IBC-NP was obviously higher than that of ACM.

Keywords: Nanoparticles Antitumor activity Aclacinomycin A

收稿日期 1994-08-01 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

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(270KB)
- ▶ [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

- ▶ 阿克拉霉素A
- ▶ 毫微粒
- ▶ 抗癌活性

本文作者相关文章

- ▶ 蒋学华
- ▶ 廖工铁
- ▶ 黄光琦
- ▶ 白绍槐
- ▶ 袁淑兰张旋波

PubMed

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

反馈

邮箱地址

| | | | |
|------|----------------------|-----|-----------------------------------|
| 人 | | | |
| 反馈标题 | <input type="text"/> | 验证码 | <input type="text" value="4953"/> |