

论文

商陆多糖I对小鼠脾淋巴细胞增殖及脾淋巴细胞、巨噬细胞分泌细胞因子的影响

王洪斌;郑钦岳;鞠佃文;方军

第二军医大学药学院药理教研室,上海200433

摘要:

商陆多糖 I (Phytolacca acinosa polysaccharides I, PAP- I)体外能显著促进小鼠脾淋巴细胞增殖,促进丝裂原诱导的淋巴细胞转化及双向混合淋巴细胞反应。检测PAP- I 和小鼠脾淋巴细胞培养上清液发现PAP- I 可显著促进小鼠脾淋巴细胞产生白细胞介素2(IL-2)及集落刺激因子(colony stimulating factor,CSF)。PAP- I 和小鼠腹腔巨噬细胞培养上清液中也存在CSF活性及促进重组粒单系集落刺激因子诱导骨髓细胞增殖的细胞因子。PAP- I ,ip可显著促进小鼠脾淋巴细胞增殖及IL-2产生。

关键词: 商陆多糖 脾淋巴细胞 巨噬细胞 集落刺激因子 白细胞介素2

EFFECTS OF PHYTOLACCA ACINOSA POLYSACCHARIDE ON SPLENIC LYMPHOCYTE PROLIFERATION AND CYTOKINE SECRETION FROM SPLENIC LYMPHOCYTE AND MACROPHAGE

HB Wang; QY Zheng; DW Ju and J Fang

Abstract:

The effects of Phytolacca acinosa polysaccharides I (PAP- I), a polysaccharide extracted from Phytolacca acinosa Roxb: on splenic lymphocyte proliferation and cytokines production from splenic lymphocyte and macrophage were studied. Lipopolysaccharides (LPS) and PAP- I were found to significantly augment splenic lymphocyte proliferation of normal BALB/c, nude BALB/e and NC mice in vitro, but concanavalin A (Con A) was shown to stimulate only normal BALB/c and nude BALB/c splenic lymphocyte proliferation. Also, PAP- I significantly enhanced Con A or LPS-induced lymphocyte proliferation and mixed lymphocyte reaction. Significant enhancement of colony stimulating factor (CSF) production was observed from splenic lymphocyte of normal BALB/c and nude BALB/c mice but not from NC mice when treated with PAP- I for 5 d. PAP- I was shown to significantly enhance interleukin-2 (IL-2) production from normal mice splenocyte and Con A stimulated normal mice splenocyte in a concentration-dependent fashion. Supernatant of PAP-treated macrophage (MΦ) were collected and CSF activity was tested. The results confirmed that PAP- I can significantly stimulate MΦ to secrete CSF activity on d 1. The supernatant also contained a cytokine which exhibited a synergistic action with recombinant murine granular-macrophage CSF (RMGMCSF) to stimulate mice bone marrow cell proliferation. PAP- I, 5~50 mg · kg<sup>-1</sup>, ip can enhanced splenic lymphocyte proliferation and IL-2 production. These findings indicate that PAP-I can augment immunologic function in vitro and in vivo.

Keywords: Polysaccharides Splenic lymphocyte Macrophage Colony stimulating factor Interleukin-2(IL-2) Phytolacca acinosa

收稿日期 1993-01-19 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

扩展功能

本文信息

- ▶ Supporting info
- ▶ PDF(328KB)
- ▶ [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

- ▶ 商陆多糖
- ▶ 脾淋巴细胞
- ▶ 巨噬细胞
- ▶ 集落刺激因子
- ▶ 白细胞介素2

本文作者相关文章

- ▶ 王洪斌
- ▶ 郑钦岳
- ▶ 鞠佃文
- ▶ 方军

PubMed

- ▶ 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="5442"/>