

论文

肉豆蔻提取物对IFN- γ 干预的小胶质细胞BV2的调控作用

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摘要:

目的 探讨肉豆蔻提取物对鼠性小胶质BV2细胞的作用机制。方法 实验分为对照组、IFN- γ 模型组、肉豆蔻提取物复合处理组。采用WST-8试剂盒, 观察肉豆蔻提取物对体外培养的鼠性小胶质细胞BV2生存率的影响, 采用分子生物学技术, 检测IFN- γ 所诱导的诱导型一氧化氮合酶(iNOS)和环氧合酶2(COX-2)的表达水平。结果 肉豆蔻提取物对鼠性小胶质细胞BV2无毒性, 且抑制了IFN- γ 所诱导的iNOS和COX-2的表达, 与IFN- γ 模型组比较差异显著(P<0.01)。结论 肉豆蔻提取物对鼠性小胶质细胞BV2具有很好的抗神经毒性及抗炎作用。

关键词: 肉豆蔻; 干扰素II型; 小胶质细胞

Effects of nutmeg extraction on microglial BV2 cells treated with IFN- γ

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Abstract:

Objective To study the effect of nutmeg ethanol extract on murine microglial BV2 cells. Methods Murine microglial BV2 cells were divided into the control group, the IFN- γ model group, and the combined nutmeg ethanol extract treatment group. The WST-8 kit was used to detect the effect of nutmeg ethanol extract on murine microglial BV2 cell viability. The effects of interferon- γ (IFN- γ) and nutmeg ethanol extract on protein expressions of inducible nitric oxide synthase(iNOS) and cyclooxygenase 2(COX-2) in vitro were measured by Western blot. Results Nutmeg ethanol extract treatment did not affect cell viability as determined by the WST-8 cell counting kit. Western blot revealed that nutmeg ethanol extract could inhibit protein expressions of iNOS and COX-2 induced by IFN- γ . There were significant differences between the combined nutmeg ethanol extract treatment group and the IFN- γ model group(P<0.01). Conclusion Nutmeg ethanol extract could exert anti-neurotoxicity and anti-inflammatory effects on murine microglial BV2 cells.

Keywords: Myristica fragrans; Interferon type II; Microglial cells

收稿日期 2011-05-27 修回日期 网络版发布日期

DOI:

基金项目:

吉林省教育厅科研基金资助项目 [吉教科合字(2011)第4号]

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