

论文

人白血病HL60细胞的分化状态对细胞凋亡的影响

孟凡宏;何琪杨;池旭生;周卫东;张鸿卿;薛绍白

北京师范大学生物系,北京100875;*中国中医研究院基础理论研究所,北京100700

摘要:

用细胞培养和流式细胞术等方法,研究人白血病HL60细胞诱导分化后,对三尖杉酯碱(Har)和喜树碱(Cam)诱导细胞凋亡的影响。结果表明,12-豆蔻酰及13-乙酸佛波酯以16nmol·L⁻¹浓度处理HL60细胞24h,细胞向单核/巨噬细胞方向分化,阻断于G₁期;分化细胞抗Har和Cam诱导的细胞凋亡,但其c-myc基因的表达无变化。1.4%二甲亚砜处理HL60细胞48h,细胞向粒细胞方向分化,阻断于G₁期;分化细胞抗Cam,而不抗Har诱导的细胞凋亡;分化细胞的c-myc基因表达明显下降。结果提示,人白血病HL60细胞的分化状态,明显影响三尖杉酯碱和喜树碱诱导的细胞凋亡,但可能与c-myc基因的表达变化无关。

关键词: 细胞分化 细胞凋亡 三尖杉酯碱 人白血病HL60细胞 c-myc基因

EFFECTS OF DIFFERENTIATION STATUS ON APOPTOSIS OF HUMAN LEUKEMIA HL60 CELLS

FH Meng;QY He;XS Chi; WD Zhou;HQ Zhang and SB Xue

Abstract:

The effects of differentiation of human leukemia HL60 on harringtonine(Har) and camptothecin (Cam) induced apoptosis (in these cells) were studied. When treated with phorbol 12-myriate,13-acetate 16 nmol·L⁻¹ for 24 h,the HL60 cells differentiated into monocyte/macrophage cells and were arrested at G₁ phase.The differentiated cells were shown to be resistant to the Har and Cam induced apoptosis,but showed no change of expression of c-myc gene.HL60 cells incubated in 1.4% dimethyl sulfoxide for 48 h differentiated into granulocyte cells ad were also gene arrested at G₁ phase. The differentiated cells became resistant to the apoptosis induced by Cam,but not that by Har,and expression of c-myc decreased drastically in the differentiated cells.The results indicatd that the differntiated status of human leukemia HL60 cells apparently affected the apoptosis induced by harringtonine and camptothecin,but it was irrelevant to the change of hte expression of c-myc gene.

Keywords: Apoptosis Harringtonine Human leukemia HL60 cell c-myc gene Cell differentiation

收稿日期 1996-08-22 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者: 薛绍白

作者简介:

参考文献:

本刊中的类似文章

1. 肖振宇;张俊平;陆峰;张大志;郑钦岳.商陆皂苷甲对细胞间粘附的影响商陆皂苷甲对细胞间粘附的影响[J]. 药学报, 2003,38(10): 728-730

扩展功能

本文信息

- ▶ Supporting info
- ▶ PDF(1476KB)
- ▶ [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

- ▶ 细胞分化
- ▶ 细胞凋亡
- ▶ 三尖杉酯碱
- ▶ 人白血病HL60细胞
- ▶ c-myc基因

本文作者相关文章

- ▶ 孟凡宏
- ▶ 何琪杨
- ▶ 池旭生
- ▶ 周卫东
- ▶ 张鸿卿
- ▶ 薛绍白

PubMed

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

2. 汪进;曾志雄;黄明辉;方宏勋;肖培根;韩锐³;杨梦甦.全反式维甲酸诱导人急性早幼粒白血病HL-60细胞分化的机制[J]. 药学学报, 2004,39(1): 22-28
3. 周卫东;张鸿卿;方敏;何琪扬;庞大本;薛绍白.维甲酸与二甲基亚砷诱导HL-60细胞及其抗性亚型MDR 1的表达和对Rhodamine-123外排的影响[J]. 药学学报, 1996,31(1): 1-1
4. 景永奎;韩锐.大豆甾元(S86019)与乳香有效成分Bc-4或阿糖胞苷对HL-60细胞分化的联合诱导[J]. 药学学报, 1993,28(1): 11-11

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.)

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="9062"/>