

论著

表皮生长因子受体反义寡核苷酸对紫外线诱导的表皮角质形成细胞c-jun活性的影响

夏济平, 宋秀祖, 孙蔚凌, 李燕华, 康健, 陈文琦, 毕志刚

南京医科大学 第一附属医院皮肤科, 南京 210029

收稿日期 2006-11-30 修回日期 网络版发布日期 2007-5-15 接受日期

摘要 摘要: 目的 探讨表皮生长因子受体(EGF-R)

反义寡核苷酸转染体外培养的表皮角质形成细胞株HaCaT后,对紫外线诱导的表皮角质形成细胞转录因子c-jun活性的影响。方法 用一种高灵敏度、高特异性的比色法测定不同剂量中波紫外线(UVB)辐射后以及EGF-R反义寡核苷酸转染后紫外线辐射的角质形成细胞c-jun活性的变化;RT-PCR方法测定EGF-

R反义寡核苷酸转染后EGF-R mRNA的表达。结果 10、20、30 mJ/cm²UVB辐射角质形成细胞后均可显著增强c-jun活性(P<0.05),不同浓度的EGF-R反义寡核苷酸转染后对30 mJ/cm²UVB诱导的EGF-R mRNA表达和c-jun活性均有显著抑制作用(P<0.01)。结论 脂质体介导的EGF-

R反义寡核苷酸转染表皮角质形成细胞可以抑制UVB辐射诱导的表皮角质形成细胞c-jun活性,表明紫外线诱导角质形成细胞c-jun激活是通过EGF-R介导的。

关键词 [紫外线](#) [角质形成细胞](#) [c-jun](#) [反义寡核苷酸](#)

分类号

Effects of Antisense Epidermal Growth Factor Receptor Oligodeoxynucleotides on Ultraviolet-induced c-jun Activity of Keratinocytes

XIA Ji-ping, SONG Xiu-zu, SUN Wei-ling, LI Yan-hua, KANG Jian, CHEN Wen-qi, BI Zhi-gang

Department of Dermatology, the First Affiliated Hospital of Nanjing Medical University, Nanjing 210029, China

Abstract ABSTRACT: Objective To explore the effects of antisense epidermal growth factor receptor (EGF-R) oligodeoxynucleotides on ultraviolet-induced c-jun activity of keratinocytes after EGF-R oligodeoxynucleotides transfect to HaCaT in vitro. Methods c-jun DNA binding activity after ultraviolet-B (UVB) irradiation and EGF-R oligodeoxynucleotides transfection were determined with a highly sensitive and specific colorimetric method. After EGF-R oligodeoxynucleotides transfection, the mRNA level of EGF-R was detected by reverse transcription polymerase chain reaction method. Results Compared with control groups, c-jun activity increased significantly in UVB (10, 20, 30mJ/cm²) irradiation groups (P<0.05). EGF-R mRNA and c-jun activities induced by UVB were inhibited after the keratinocytes were transfected with EGF-R antisense oligodeoxynucleotides at 2, 4 and 8 μg/ml concentrations(P<0.01). Conclusion The ultraviolet-induced c-jun activity of keratinocytes can be mediated by EGF-R and inhibited by EGF-R antisense oligodeoxynucleotides, which is transfected to keratinocytes and mediated by lipofectamine.

Key words [ultraviolet](#) [keratinocyte](#) [c-jun](#) [antisense oligodeoxynucleotide](#)

DOI:

通讯作者 毕志刚 eltonbi@21cn.com

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(774KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [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](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ [本刊中 包含“紫外线”的相关文章](#)
- ▶ [本文作者相关文章](#)

- [夏济平](#)
- [宋秀祖](#)
- [孙蔚凌](#)
- [李燕华](#)
- [康健](#)
- [陈文琦](#)
- [毕志刚](#)