

食管鳞癌中lncRNA uc061hsf.1的表达及对Eca109、KYSE450细胞增殖、凋亡和侵袭的影响

《现代肿瘤医学》[ISSN:1672-4992/CN:61-1415/R] 期数: 2019年20期 页码: 3606-3611 栏目: 论著(胸部肿瘤) 出版日期: 2019-09-08

Title: Expression of lncRNA uc061hsf.1 in esophageal squamous cell carcinoma and its effect on proliferation, apoptosis and invasion of Eca109 and KYSE450 cells

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关键词: 食管鳞癌; 长链非编码RNA; uc061hsf.1; 细胞凋亡

Keywords: esophageal squamous cell carcinoma; long non-coding RNA; uc061hsf.1; cell apoptosis

分类号: R735.1

DOI: 10.3969/j.issn.1672-4992.2019.20.013

文献标识码: A

摘要: 目的: 探讨uc061hsf.1基因在食管鳞癌(esophageal squamous cell carcinoma, ESCC)中表达及其对Eca109与KYSE450细胞增殖、凋亡、侵袭能力的影响。方法: 本文对34例ESCC组织及癌旁组织进行RT-PCR检测, 分析uc061hsf.1的表达与ESCC临床病理特征关系; 通过在Eca109与KYSE450细胞系中沉默和上调uc061hsf.1表达, 分别检测两组细胞增殖、凋亡、侵袭能力的变化。结果: uc061hsf.1在ESCC组织中低表达, 其表达水平在分化差、淋巴结转移的患者中更低(P均<0.05), 与年龄、性别等无明显相关性; 沉默uc061hsf.1可导致Eca109与KYSE450细胞系增殖及侵袭能力均明显升高, 细胞凋亡无明显变化; 相反, 上调uc061hsf.1在这两组细胞系中的表达, 则两组细胞系的增殖和侵袭能力均明显降低, 且细胞凋亡率明显增加。结论: uc061hsf.1沉默可促进食管鳞癌Eca109与KYSE450细胞增殖和侵袭能力; 而过表达uc061hsf.1能够抑制Eca109与KYSE450细胞增殖和侵袭, 且促进细胞凋亡。

Abstract: Objective: To investigate the expression of uc061hsf.1 gene in esophageal squamous cell carcinoma (ESCC) and its effect on the proliferation, apoptosis and invasion of Eca109 and KYSE450 cells. Methods: Thirty-four ESCC tissues and adjacent tissues were examined by RT-PCR. The relationship between the expression of uc061hsf.1 and the clinicopathological features of ESCC was analyzed. The two groups were detected by silencing and up-regulating uc061hsf.1 in Eca109 and KYSE450 cell lines. Changes in cell proliferation, apoptosis, and invasion ability were observed. Results: uc061hsf.1 was lowly expressed in ESCC, and its expression level was lower in patients with poor differentiation and lymph node metastasis (P < 0.05), and had no significant correlation with age, gender, etc. Silencing uc061hsf.1 could lead to the proliferation and invasion ability of Eca109 and KYSE450 cell line were significantly increased, and the apoptosis did not change significantly. On the contrary, the expression of uc061hsf.1 in the upper two cell lines was up-regulated, and the proliferation and invasion ability of the two cell lines were significantly reduced. The apoptotic rate was increased significantly. Conclusion: Silencing of uc061hsf.1 can promote the proliferation and invasion of Eca109 and KYSE450. Overexpression of uc061hsf.1 can inhibit the proliferation and invasion of Eca109 and KYSE450, and promote cell apoptosis.

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更新日期/Last Update: 1900-01-01