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155~160.Raf激酶抑制蛋白增强卵巢癌细胞的化疗敏感性[J].宋继文,高燕,林璨璨,李宏钊,姚智,邓为民.中国肿瘤生物治疗杂志

Raf激酶抑制蛋白增强卵巢癌细胞的化疗敏感性 [点此下载全文](#)

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摘要:

摘要 目的: 探讨Raf激酶抑制蛋白(Raf kinase inhibitor protein, RKIP)对卵巢癌SKOV-3细胞化疗敏感性的影响。将真核表达质粒pcDNA3.1-ssRKIP转入SKOV-3细胞中, Western blotting检测SKOV-3细胞中RKIP蛋白的表达。MTS法观察RKIP基因转染对顺铂处理后SKOV-3细胞增殖的影响, 流式细胞仪检测RKIP基因转染对顺铂诱导SKOV-3细胞凋亡的影响。不同浓度顺铂处理细胞24、48、72 h后, RKIP基因转染细胞增殖抑制率明显高于未转染细胞。2.5 μg/ml顺铂作用SKOV-3细胞24 h后, RKIP转染细胞的凋亡率为(10.86±0.73)%, 明显高于未转染细胞的(4.27±0.43)%(P<0.01); 在无顺铂作用情况下, RKIP转染细胞的凋亡率为(3.11±0.78)%, 仍然高于未转染细胞的(1.51±0.46)%(P<0.01)。细胞周期检测结果显示, RKIP转染细胞G₀/G₁期的比例下降, S期的比例增加, 转染的SKOV-3细胞对化疗药物顺铂的敏感性增加。

关键词: [Raf激酶抑制蛋白](#) [卵巢癌](#) [顺铂](#) [化疗敏感性](#)

Raf kinase inhibitor protein enhances chemosensitivity of ovarian cancer cells [Download Fulltext](#)

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Abstract:

Abstract Objective: To explore the effect of Raf kinase inhibitor protein (RKIP) on the chemosensitivity of ovarian cancer cells. Methods: Eukaryotic expression plasmid pcDNA3.1-ssRKIP containing full-length human RKIP cDNA was transfected into SKOV-3 cells by lipofect assay. Expression of RKIP in SKOV-3 cells was determined by Western blotting and MTS assay. Transfected SKOV-3 cells were treated with different concentrations of cisplatin, and the effect of RKIP or cisplatin was measured by MTS assay. Flow cytometry was used to detect the effect of RKIP on the cell cycle of SKOV-3 cells after cisplatin treatment. Results: The expression of RKIP in SKOV-3 cells was significantly increased after transfection with pcDNA3.1-ssRKIP. The growth inhibitory rate of SKOV-3 cells in pcDNA3.1-ssRKIP transfection group was significantly higher than that in the control group after treatment with different concentrations of cisplatin for 24 h, 48 h or 72 h (P<0.01). After treatment with 2.5 μg/ml for 24 hours, pcDNA3.1-ssRKIP-transfected SKOV-3 cells showed a significantly higher percentage of apoptosis (10.86±0.73%) compared with non-transfected cells (4.27±0.43%) and empty vector-transfected cells (4.02±0.43%). Without cisplatin treatment, the apoptosis rate of SKOV-3 cells transfected with pcDNA3.1-ssRKIP was (3.11±0.78)%, which was significantly higher than that of non-transfected cells (1.51±0.13%) and empty vector-transfected cells (1.97±0.46%). After cisplatin treatment, the proportion of cells in G₀/G₁ phase and more cells in S phase in pcDNA3.1-ssRKIP-transfected cells compared with the control group. Conclusions: Over-expression of RKIP gene can increase the chemosensitivity of SKOV-3 cells to cisplatin.

Keywords: [Raf kinase inhibitory protein\(RKIP\)](#) [ovarian cancer](#) [cisplatin](#) [chemosensitivity](#)

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