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抗人stathmin单克隆抗体与紫杉醇联用对人肝癌细胞增殖的抑制作用 点此下载全文

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摘要：

目的: 探讨抗人stathmin单克隆抗体和紫杉醇单用或联用对肝癌细胞系HepG2增殖的抑制作用。方法: 以不同浓度的抗人stathmin单克隆抗体、紫杉醇分别组成单药组和联合用药组, 另设不加药的空白对照组,分别作用于HepG2细胞24、48、72和96 h,观察细胞数量和形态的变化，MTT法检测各用药组对HepG2细胞增殖的抑制作用，AnnexinV/PI双染法检测各组细胞凋亡率的改变。结果: 不同浓度的各组药物作用后细胞数量明显减少，形态不规则,部分细胞变圆、细胞核固缩和胞质减少，而对照组细胞生长状态良好。抗人stathmin单克隆抗体、紫杉醇单药与联用均能抑制HepG2细胞增殖, 呈剂量 时间依赖效应, 联用组细胞增殖抑制率较单药组明显增高(P <0.05),两药联用有交互效应(P <0.05)。抗人stathmin单克隆抗体、紫杉醇单用与联用均能诱导HepG2细胞凋亡，联合组作用更为明显(P <0.05)。结论: 抗人stathmin单克隆抗体、紫杉醇单药与联用均能抑制HepG2细胞增殖和诱导其凋亡，两药联合使用具有协同作用。

关键词：stathmin 单克隆抗体 紫杉醇 肝肿瘤 增殖 凋亡

Inhibitory effects of anti stathmin monoclonal antibody combined with paclitaxel against proliferation of human hepatocellular carcinoma cell line HepG2 Download Fulltext

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Abstract:

Objective:To investigate the inhibitory effects of anti stathmin monoclonal antibody combined paclitaxel on the proliferation of human hepatocellular carcinoma cell lines HepG2.Methods: HepG2 cells were treated with anti stathmin monoclonal antibody, paclitaxel or their combinations; untreated cells served as control. 24, 48, 72, and 96 h after exposure, the numbers and morphology of cells in different groups were observed under inverted microscope. Proliferation and apoptosis of HepG2 cells in different groups were studied by MTT and Annexin V/PI staining, respectively. Results: The numbers of HepG2 cells were decreased in all treated groups; and the cells in these groups showed morphological changes: some with round shape, some with nuclear chromatin condensation; but HepG2 cells in the control group did not show abnormal morphology. Anti stathmin monoclonal antibody, paclitaxe alone or in combinations dose dependently inhibited the proliferation of HepG2 cells, and the inhibitory rate in the combination group was significantly higher than those in the two single drug groups (P <0.05), suggesting a synergistic effect between the two drugs (P <0.05). Anti stathmin monoclonal antibody, paclitaxe alone or in combinations induced apoptosis of HepG2 cells, and the apoptosis in the combination group was higher than those in the two single drug groups (P <0.05). Conclusion: Anti stathmin monoclonal antibody, paclitaxe alone or in combination can inhibit proliferation and induce apoptosis of HepG2 cells, and a synergistic effect is observed between anti stathmin monoclonal antibody and paclitaxe.

Keywords:stathmin monoclonal antibody paclitaxel liver neoplasms proliferation apoptosis