Abstract

OBJECTIVE:

To study the suppressive role of emodin on the growth and its effect on the proliferation cycle and apoptotic gene of human lung adenocarcinoma cell line Anip 973.

METHODS:

The survival rate and the inhibitory rate of Anip 973 cell in vitro were detected by MTT colorimetric assay and cell growth curve assay at different time points under different concentration of emodin; the cell proliferation cycle and the apoptotic rate were examined with flow cytometry analysis, and Caspase-3 protein expression was measured by immunoblotting assay.

RESULTS:

Emodin inhibited the proliferation of Anip 973 cell at G0/G1 phase, decreased the cell ratio at S phase and activated the Caspase-3 protein. It suppressed the growth of tumor cells and raised the apoptotic rate in a concentration and time depending manner in a certain extent.

CONCLUSION:

Emodin could suppress the proliferation of Anip 973 cell, and its mechanism of anticancer effect may be through activating Caspase-3, to induce apoptosis and block cell cycle.

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