(구두-2)

제목 :Effects of Ginsenoside Rg_3 and Rh_2 on the Proliferation of Androgen Dependent and Independent Prostate Cancer Cells

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초록

BACKGROUND. Ginseng has anti-cancer effect on several cancer models. This study was to characterize active constituents of ginseng and their effects on proliferation of prostate cancer cell lines named LNCaP and PC3.

METHODS. Cell proliferation was measured by [^{3}H]thymidine incorporation. The intracellular calcium concentration ([Ca^{2+}]) was measured by a dual-wavelength spectrophotometer system. The effects on mitogen-activated protein kinases were measured by western blotting. Cell attachment and morphologic changes were observed under microscopic staining.

RESULTS. Among the tested 11 ginsenosides, ginsenosides Rg_3 and Rh_2 inhibited proliferation of cancer cells. The EC_{50}s of Rg_3 and Rh_2 were 8.4 μM and 5.5 μM respectively in PC3 cells and 14.1 μM and 4.35 μM respectively in LNCaP cells. Both ginsenosides strongly inhibited p42/44 MAP kinases and modulated p38 kinase.

CONCLUSIONS. Ginsenosides Rg_3 and Rh_2 may inhibits the proliferation of prostate cancer cell lines associated with inhibition of p42/44 MAP kinases.

참고문헌

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