ABSTRACT

The Chinese Herbs Scutellaria baicalensis and Fritillaria cirrhosa Target NFκB to Inhibit Proliferation of Ovarian and Endometrial Cells

ANALYSES

SB and FS Decreased the Ability of Cancer Cells to Grow in Soft Agar and Migrate Through Matrigel

SB and FS Caused Time-Dependent Suppression of Ovarian and Endometrial Cell Growth

SB and FC Inhibited Cell Proliferation Through Apoptosis and Cell Cycle Arrest at G0, Phase

SB and FC Inhibited Activation of NF-κB as Measured in a DNA-Binding Assay

SB and FC Inhibited NF-κB Regulated Proteins

Cells treated with SB or FC for 96 h were analyzed by Western blotting for the expression of CXCR4 and MMP-9. B-Actin was used as a loading control. The immunoblots shown represent three independent experiments with similar results. The values above the bands represent relative density of the bands normalized to B-Actin.

Knockdown of NFκB-p50 Attenuates SB and FC Growth Inhibitory Effects on Cancer Cells

Effect of NFκB silencing on protein expression and growth of ovarian and endometrial cells. Cells were transfected with NFκB-p50 siRNA (5 nM) or control siRNA (5 nM) using Lipofectamine 2000. After 24 h, cells were treated with SB or FC for 5 d. (A) Expression of NFκB-p50 was analyzed by Western Blot. (B) Cell proliferation was evaluated by MTS assay. Data shown are means ± SEM of values from three independent experiments. *P < 0.05 (statistically significant) between the control and the two treatment groups. **P values < 0.05 (statistically significant) between the NFκB knockdown and the NFκB knockdown SB- and FC-treated groups.