

Induction of differentiation in rat C6 glioma cells with saikosaponins

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摘要

Abstract

The effects of saikosaponins (a, b1, b2, c, d), isolated from *Bupleurum Radix*, on the induction of differentiation in rat C6 glioma cells were studied. Saikosaponins a and d were shown to inhibit cell proliferation and alter cell morphology. In addition to cytostasis, the enzymatic activities of glutamine synthetase (GS) and 2,3-cyclic nucleotide 3-phosphohydrolase (CNP) were also noticeably increased after treatment with saikosaponin a. Nevertheless, saikosaponin d only showed an increase of GS activity, no significant changes in CNP activity were found. These results suggest that saikosaponin a can induce the differentiation of C6 glioma cells into astrocytes and/or oligodendrocytes, but saikosaponin d can only induce the differentiation of C6 glioma cells into astrocytes. Copyright © 2002 John Wiley & Sons, Ltd.