Molecular mechanism of antiproliferation potential of Acacia honey on NCI-H460 cell line.


Source

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Abstract

Lung cancer is one of the leading causes of death worldwide. We investigated the molecular mechanism of antiproliferation potential of Acacia honey on NCI-H460 cells by cell cycle, viability, cytokines, calcium ion and gene expression analysis. Acacia honey inhibited cells proliferation, arrested G0/G1 phase, stimulated cytokines, calcium ion release as well as suppressed p53 and Bcl-2 expression in a dose-dependent manner. We proposed that the molecular mechanism of the antiproliferation potential of Acacia honey on NCI-H460 cell line is due to cell cycle arrest, stimulation of cytokines and calcium ion as well as downregulation of Bcl-2 and p53 genes.

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