

PROAPOPTOTIC EFFECT OF 2-EPI-JASPINE B ON HELA CELLS.

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Conventional antineoplastic agents lack selectivity for healthy cells and their use is often associated with serious adverse effects therefore, new compounds are still being sought that exhibit lower toxicity. 2-*epi*-jaspine B exhibited significant antitumour growth inhibitory activity against various cancer cell lines¹. Flow cytometric analysis revealed increase of the cells in S phase of the cell cycle followed by increase in apoptotic sub-G0/G1 population associated with phosphatidylserine externalization. Apoptosis induced by 2-*epi*-jaspine B was associated with loss of MMP, increased activity of executive caspase-3 and cleavage of PARP and release of the anti-apoptotic Bcl-2 in the cytosol where it was predominantly phosphorylated and thereby unable to mediate its antiapoptotic effect.

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References: Mezeiova E. et al. Total synthesis and antiproliferative/cytotoxic profiling of 2-*epi*-jaspine B. *Carbohydr Res.* 2016 Mar 24;423:70-81. doi: 10.1016/j.carres.2016.01.011.

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