

Cytotoxic Activity and Apoptosis Induction by Gaillardin

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Cytotoxic activity of gaillardin, a sesquiterpene lactone isolated from *Inula oculus-christi* L. (Asteraceae), was assessed in the human breast adenocarcinoma cell line MCF-7, human hepatocellular carcinoma cell line HepG-2, human non-small cell lung carcinoma cell line A-549, and human colon adenocarcinoma cell line HT-29, resulting in IC₅₀ values of 6.37, 6.20, 4.76, and 1.81 µg/mL, respectively, in the microculture tetrazolium-formazan MTT assay. *In vitro* apoptosis-inducing properties of gaillardin were also evaluated in MCF-7 cells with the terminal deoxynucleotidyl transferase-mediated deoxyuridine triphosphate nick-end labeling (TUNEL) assay. The results suggest gaillardin as a candidate for further studies in cancer therapy

Key words: Gaillardin, TUNEL, MTT Assay