บทความเรื่อง Anticancer effects of piperine-free Piper nigrum extract on cholangiocarcinoma cell lines

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Anticancer effects of piperine-free Piper nigrum extract on cholangiocarcinoma cell lines.

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Description	Abstract Background: Black pepper (Piper nigrum L.) is widely used as a traditional medicine, including usage for pain relief, fevers, as well as an anticancer agent. Previously, we reported that piperine-free P. nigrum extract (PFPE) inhibited breast cancer in vitro and in vivo. Objective: In this present study, we explored the anticancer effects of PFPE on cholangiocarcinoma (CCA). Materials and Methods: 3-(4, 5-dimethyl thiazol-2-yl)-2, 5-diphenyltetrazolium bromide assay was performed to analyze cytotoxic potential of PFPE whereas deoxyribonucleic acid (DNA) fragmentation followed by Western blot analysis were used. Results: PFPE composed of alkaloid, flavonoid, amide, lignans, opioid, and steroid. This crude extract represented cytotoxic effect against CCA cells which stronger than dichloromethane P. nigrum crude extract and piperine, especially on KKU-M213 (median inhibition concentration [IC_{50}] at 13 …
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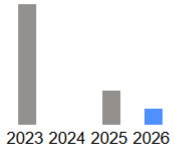

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Quinalphos-induced chromosomal instability, DNA Damage, and Bax/Bcl-2 dysregulation in mouse bone marrow: Protective effects of Piperine

Preeti Singh, Vinod Kumar, Preeti Bagri, Kanisht Batra, Deepika Lather

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Abstract

Quinalphos (QNP), an organophosphate insecticide, is known to induce genotoxic and cytotoxic effects in non-target organisms. This study evaluated the impact of subacute QNP exposure on chromosomal stability, DNA integrity, and apoptosis-related gene expression in bone marrow cells of male Swiss albino mice, and assessed the genoprotective potential of piperine (PIP), a bioactive compound from Piper nigrum. Mice were allocated into six groups: control (2% gum acacia), QNP I (0.375 mg/kg b.w.), QNP II (0.75 mg/kg b.w.), PIP alone (10 mg/kg b.w.), QNP I + PIP, and QNP II + PIP. All treatments were administered orally for 28 days. Genotoxicity was

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