Cassia angustifolia

different phytoconstituents of Cassia Angustifolia were found to be associated with anti-microbial, anti-cancer, and anti-inflammatory effects. Therefore, the aim of the study was to evaluate the antiproliferative efficacy of ethanolic leaf extract of C. Angustifolia (LCaEt-OH) against rat-derived glioblastoma C6 cancer cell lines. Briefly, the anti-proliferative potential of LCaEt-OH was assessed using MTT assay, quantitative estimation of ROS, and evaluation of mitochondrial membrane potential ($\Delta\Psi$ m). Moreover, the activity of caspases involved in intrinsic apoptotic pathways was also investigated using a colorimetric kit followed by quantitative RT-PCR evaluation of modulation in gene expressions triggered due to LCaEt-OH treatment. Treatment of LCaEt-OH on C6 cells elucidated a substantial dose-dependent decline in cellular viability. Furthermore, LCaEt-OH showed its efficacy in substantially enhancing intracellular ROS. LCaEt-OH also incited apoptosis in C6 cells by instigating nuclear condensation and dissipation of $\Delta\Psi$ m. In addition, LCaEt-OH mediated instigation of apoptosis was directly influenced by increased activity of caspases indispensable for an intrinsic apoptotic pathway. This conclusive evidence indicates towards anticancer efficacy of LCaEt-OH against C6 cancer cell lines¹⁾.

1)

Pang X, Huang H, Wei Y, Leng J. Ethanolic Leaf Extract of C. angustifolia Instigates ROS Mediated Apoptosis within Glioblastoma C6 Cells. J Oleo Sci. 2022;71(9):1375-1385. doi: 10.5650/jos.ess22143. PMID: 36047243.

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