

# Bioactivity and genotoxicity analysis of Ajugas cultured in taiwan

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## ABSTRACT

Ajuga has many different bioactivities including anti-inflammatory, anti-tumor cell and reduced the blood pressure in traditional medical treatment. In this study, we chose different cellular bioassays to investigate the functions of extraction from Ajugas. The antioxidant activity showed that 75% of ethanol extraction from Ajugas pygmaea has the better effect. The test of anti-inflammatory and cytotoxicity showed that 25% of ethanol extraction from Ajugas pygmaea has the best effect. The 50% and 25% of ethanol extraction selectively inhibited the growth of HepG2 liver tumor cell lines. The data showed that the oxidative stress and ER stress are involved in the cell death of HepG2 cells induced by the extraction of Ajuga. Moreover, the extracts of Ajuga have no genotoxicity in our analysis.

Keywords : Ajugas、bioactivity、genotoxicity

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