

엄나무잎 분획물의 항암활성 평가

강원대학교: 호위성, 왕명현*

Anticancer Activity of Different Fractions from *Kalopanax pictus* Leaves

School of Biotechnology, Kangwon National University

Weicheng Hu and Myeong-Hyeon Wang*

Objectives

To measure anticancer activities of different fractions from *Kalopanax pictus* leaves.

Materials and Methods

○ Materials

The leaves of *K. pictus* were collected from Chuncheon city of Kangwon-do in Korea.

○ Methods

MTT assay.

Flow cytometry assay.

Determination of mRNA expression level.

Results

Fig. 1. Anticancer activity of different fractions from *K.pictus* leaves. (●) CH₂Cl₂ fraction, (○) EtOAc fraction, (▼) n-BuOH fraction, (△) H₂O fraction, (■) 5-FU.

Fig. 2. Cytotoxicity to HEK 293 of different fractions from *K. pictus* leaves. (●) CH₂Cl₂ fraction, (○) EtOAc fraction, (▼) n-BuOH fraction, (△) H₂O fraction, (■) 5-FU.

Fig. 3. Flow cytometric analysis of HT-29 cancer cells after incubated with 100 mg/mL of EtOAc fraction of *K. pictus* extract for 24h. The right bottom quadrant represents the cells stained by Annexin V (early phase apoptotic cells). The top right quadrant represents cells stained by both PI and Annexin V (late phase apoptotic / necrotic cells).

Fig. 4. (A) Induction of caspase-3, c-myc and p53 expression in HT-29 cancer cells. HT-29 were cultured in the absence (control) or presence of EtOAc fraction of *K. pictus* extract for 12h.

Discussions

Taken together, these findings suggest that *K.pictus* leaves exhibit anticancer activity. Further studies will be needed to identify the active compounds that confer the anticancer activities of *K.pictus* extract.

(Corresponding author): 왕명현 E-mail: mhwang@kangwon.ac.kr Tel: 033-250-6486

Fig. 1.

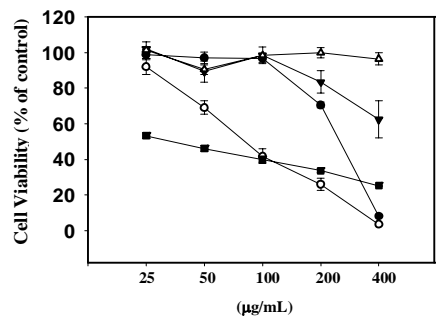


Fig. 2.

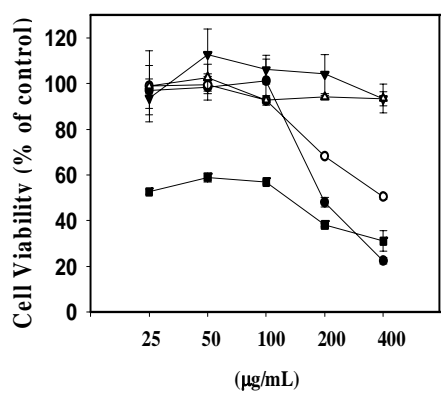


Fig. 3.

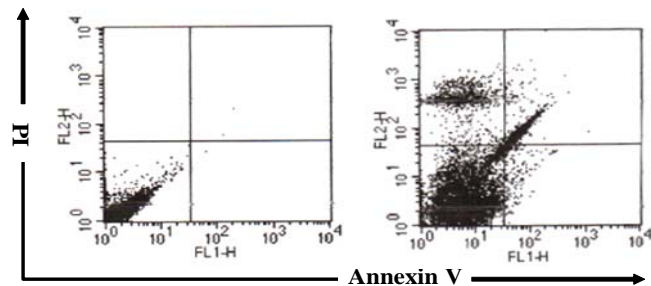


Fig. 4.

