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In the previous studies, we confirmed the anti-inflammatory components of *Kalopanax pictus* bark using activity-guided fractionation in vivo. For the elucidation of anti-inflammatory mechanism, we evaluated the effects of these components on the inhibition of NF- $\kappa$ B activity and human leukocyte elastase. A cell-based assay system developed in our laboratory<sup>(1)</sup> was used in transfectant RAW 264.7 cells. We found that kalopanaxaponin A and I showed potent inhibition of NF- $\kappa$ B activity at doses of 1 ~ 2.5  $\mu$ g/mL and 2.5 ~ 5  $\mu$ g/mL, respectively. Of the compounds tested, kalopanaxaponin A showed the most potent inhibition of elastase activity.

(1) Moon KY, Hahn BS, Lee JS, Kim YS. (2001) Anal. Biochem. 292, 17-21.

[PA1-35] [ 10/18/2002 (Fri) 09:30 - 12:30 / Hall C ]

### Ircinin-1 from the Sponge *Sarcotragus Species* Induces of Cell Proliferation and Apoptosis in the Human Skin Cancer Cells

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We investigated the anti-proliferative effects of a new compound, ircinin-1, from the sponge *Sarcotragus sp.* on SK-MEL-2 human skin cancer cells. From the data of MTT assay, cell viability was decreased by ircinin-1 in a dose-dependent manner. We observed that the anti-proliferative effect of ircinin-1 was due to the induction of apoptosis, which was confirmed by observing the morphological changes, the increased ratio of pro-apoptotic protein Bax to anti-apoptotic protein Bcl-2, and cleavage of poly(ADP-ribose) polymerase protein, via activation of caspase-3. The expressions of Fas and Fas-L also increased. Hence, these results suggest that the newly isolated ircinin-1 is capable of inhibiting cell proliferation and inducing apoptosis in human skin cancer cells.

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### Inhibitory Effect of Luteolin on TNF- $\alpha$ -Stimulated IL-8 Secretion from Intestinal Epithelial Cells

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Intestinal epithelial cells can produce cytokines and chemokines that play an important role in the mucosal immune response. Regulation of this secretion is important to prevent inflammatory tissue damage. *Lonicera japonica* have been shown to inhibit inflammation. We tested the effect of luteolin, a major ingredient of *Lonicera japonica*, on TNF- $\alpha$ -stimulated IL-8 secretion from Intestinal epithelial