

[PC3-5] [10/19/2001 (Fri) 09:00 - 12:00 / Hall D]

Effect of MC fraction of *Spatholobus suberectus* is on induction of apoptosis.

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Spatholobus suberectus is a herb used for treatment of blood stasis. From fractionation screening on cytotoxicity on cancer cells, MC(methylene chloride) fraction of *Spatholobus suberectus* was most effective. IC50 of *Spatholobus suberectus* was 20 ug/ml against U937. It also induced DNA fragmentation clearly from the concentration of 40 ug/ml. We found apoptotic portion in U937 cells stained by Annexin V by FACS analysis and observed apoptotic bodies by TUNEL method. Furthermore, the treatment of U937 cells with MC(methylene chloride) fraction of *Spatholobus suberectus* caused activation of caspase-3 protease and subsequent proteolytic cleavage of poly(ADP-ribose) polymerase. These results suggest MC(methylene chloride) fraction of *Spatholobus suberectus* has apoptotic activity.

[PC3-6] [10/19/2001 (Fri) 09:00 - 12:00 / Hall D]

Cloning of Human Intestinal Taurine Transporter and Detection of Taurine Transporter by RT-PCR in Murine Organs

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Taurine (2-ethaneaminosulfonic acid) is one of the major intracellular β -amino acids in mammals and is required for a number of biological processes, including osmoregulation, antioxidation, and detoxification. The taurine transporter(TAUT), which contains 12 hydrophobic membrane-spanning domains, has been cloned recently from several species and tissues. One step RT-PCR was performed to amplify a cDNA encoding a TAUT in the human intestinal epithelial cells, HT-29. To define the tissue distribution patterns of the TAUT, one step RT-PCR was used to detect cDNA sequence representing mRNA seven different mouse tissues. The coding region of a PCR product was 732 bp long and two oligomers derived from amino acids 31-38 and 317-324 of TAUT. These primers were designed to encode highly conserved amino acid sequences near the transmembrane domains III (IPYFIFLF) and VI (KYKYNSYR). The resulting sequence of human intestinal TAUT cDNA (Accession number of NCBI Genebank is AF346763) was identical to those TAUTs recently determined in the human placenta and retina except 3 base pairs from that of the reported thyroid. The murine TAUT was detected in all of the mouse tissues analyzed such as heart, lung, thymus, kidney, liver, spleen and brain. A large amount of transcript were found in mRNA isolated from the heart, liver, spleen, kidney, and brain. But lung contained a very small amount of transcript.

[PC3-7] [10/19/2001 (Fri) 09:00 - 12:00 / Hall D]

p38 MAP kinase is involved in ceramide-induced apoptosis in HL-60 cells.

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The lipid mediator ceramide is emerging as a regulator involved in apoptosis, but the role of ceramide in