[PB4-3] [ 10/20/2000 (Fri) 15:30 - 16:30 / [Hall B] ]

## Effects of Lectin-conjugated Ellagitannin on Inhibition of Melanoma Metastasis

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Recently, studies of missile antitumor drugs which selectively act on tumor cell and display drug effects, are proceeding sprightly. This missile antitumor drugs which are increased durg effects and decreased side effecs, are ideal medication method. We studied inhibition of melanoma metastasis with lectin-conjugated ellagitannin(lectin: carbohydrate-binding protein: tumor cell specific binding protein, Wheat Germ Agglutinin: melanoma specific binding protein, ellagitannin: praecoxin A: excellent antitumor effect). In this study, we injected mouse melanoma cell, B16-F10, on right the sole of the forefoot of C57BL/6 mouse, and after administration with drug, observed the number of pulmonary tumor colony.

[PB4-4] [ 10/20/2000 (Fri) 15:30 - 16:30 / [Hall B] ]

## T-cell mitogenic activity of a lectin fraction from a wood -rotting wild mushroom Fomitella fraxinea

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A lectin fraction, FFL (*Fomitella fraxinea* lectin), was prepared from the carpophores of *Fomitella fraxinea*, a wood-rotting basidiomycetous fungus, by extraction with 4 mM Tris buffer, precipitation with ammonium sulfate and/or ethanol and then dialysis using a cellulose tube (MWCO. 8,000 ~ 10,000). The protein to polysaccharide ratio of FFL was 3.0 ~ 39.4 when analyzed using Coomassie brilliant blue and anthrone reagent. FFL was found to agglutinate not only erythrocytes but also leukocytes as well as sarcoma 180 tumor cells, whereas it showed no hemolytic activity. In a flow cytometric analysis on splenic lymphocytes of BALB/c mice, FFL, at 2.5 ㎍/㎖ or higher, was found to be strongly mitogenic on T cells rather than non-T cells, the specificity being more remarkable than that of a well-known T cell mitogen, concanavalin A. At 100 ㎍/㎖ or higher, FFL also exhibited growth inhibition on sarcoma 180 tumor cells, the inhibition ratio being 39.7 %. Patent on this lectin fraction is now pending.

[PB4-5] [ 10/20/2000 (Fri) 15:30 - 16:30 / [Hall B] ]

## Flow cytometric investigation on antitumor activity of protein -polysaccharide fractions from mycelial culture of insects -born fungus Paecilomycetes japonica DGUM 32001

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PT4, a protein-polysaccharide fraction separated from mycelial culture of a insect-born fungus, *Paecilomycetes japonica* DGUM 32001, was subjected to a flow cytometric analysis for their *in vivo* antitumor and immunomodulating activity in sarcoma 180 tumor-bearing ICR mice. When