

[Yakushigaku-Zasshi, 29, 1-8 (1994)]

[Lab. of Herbal Garden]

**On a circular Notice about Herbs in Kiso-dani of Mid-Edo Period**

TAKAO GOTO, TOSHIHIRO TANAKA,\* SHIGEHARU YAMAGUCHI.

There is a circular notice about the gathering of herbs in Kiso-dani of Mid-Edo Period, and this notice is stocked at T.Shimada's House in Nakatsugawa City. Thirty-two herb names and the price are recorded in this notice, and some of them have the precise description of collection, medicinal parts, processing general treatment etc. Doeki Minura contributed greatly to the development of Kiso-Yakushu ( crude drug ), however, we cannot pass over the activity of Saiyaku-shi ( medicinal officer ) as well.

[Environ.Mut.Res.Commun., 16, 195-204 (1994)]

[ Lab. of Radioisotope ]

**A new cytochrome P450 inducer for Ames test.**

YUKIO MORI\*, KAZUNORI IIMURA and YOICHI KONISHI

The effects of *N*-benzylimidazole(BI) on mutagenic activation of six groups of carcinogens were studied with Ames liquid incubation assay. Intra-gastric treatment of male Sprague-Dawley, ACI/N and Wistar rats for 3 days with BI produced 2.6~3.4-fold induction of hepatic microsomal cytochrome P450. In the presence of liver S9 from BI-treated SD rats, the mutagenicity of five *N*-nitrosamines on *S. typhimurium* TA100 and two arylamines, aflatoxin B<sub>1</sub>, two polycyclic hydrocarbons, two aminoazo compounds and six heterocyclic amines on TA98 was induced 2~78-fold above controls. These results demonstrate the use of BI for metabolic induction to be an effective alternative for induction with either polychlorobiphenyls or a combination of phenobarbital and  $\beta$ -naphthoflavones.

[FEBS lett., 340, 177-180 (1994)]

[Lab. of Biology]

**Tumor Necrosis Factor Is Markedly Synergistic with Interleukin 1 and Interferon- $\gamma$  in Stimulating The Production of Nerve Growth Factor in Fibroblasts.**AKIRA HATTORI, SHOJI IWASAKI, KATSUHITO MURASE, MASAFUMI TSUJIMOTO,  
MASAHIRO SATO, KYOZO HAYASHI, MICHIAKI KOHNO\*

A possible interaction between tumor necrosis factor- $\alpha$  (TNF) and other cytokines in stimulating the production of nerve growth factor (NGF) in Swiss3T3 cells was studied. TNF's stimulatory activity on NGF production was synergized by interleukin-1 $\alpha$  (IL-1 $\alpha$ ), IL-1 $\beta$  and interferon- $\gamma$  (IFN- $\gamma$ ), but was antagonized by transforming growth factor- $\beta$  (TGF- $\beta$ ). These findings reinforce the idea that TNF, in concert with IL-1 $\alpha/\beta$ , plays an essential role in regulating the regeneration of peripheral nerves following injury through a mechanism stimulating NGF production in fibroblasts.