

determined if the two compounds, Zaluzanin-C and Estafiatone isolated from *Anisliaea acerifolia*, modulate iNOS gene expression and PGE₂ synthesis in LPS/IFN- γ -stimulated RAW 264.7 cell. Treatment with two compounds inhibited NO production, PGE₂ synthesis a concentration-dependent manner. Furthermore, two compounds inhibit iNOS protein and mRNA expression. These results of two compounds may provide the possibility for developing anti-inflammatory agents.

[PC1-13] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Development of the On-site Assay for Methamphetamine

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Methamphetamine (MA) abuse has become a serious social concern, particularly in Asia, since it is a potent central nervous stimulant. Confirmation of MA abuse in biological samples has usually been performed using instruments such as GC/MS. It, however, requires great expertise and a considerable amount of time to obtain the result.

For the purpose of fast screening of a large number of samples on the field, we have developed an on-site detection kit based on the membrane immunoassay. Colloidal gold was used as a tracer, and conjugated with the anti-MA antibody (Ab). It was designed so that the Ab-gold conjugate could bind either MA in sample or the MA-BSA conjugate attached to the membrane while it migrate along the strip together with the sample.

The positive/negative result could be read by the naked eye within three minutes without any expertise. The kit developed was allowed to detect MA lower than 1 μ g/ml with 150 μ l of sample. Evaluation study showed that the strip was stable more than eight months at RT under the desiccated condition. The result of the strip correlated with that of the fluorescence polarization immunoassay by over than 90 %.

[PC1-14] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Regulation of cell growth by transmethylator inhibitor

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Oligosaccharide-linked acyl carrier protein (ACP) purified from porcine liver was identified as a novel transmethylator inhibitor. In cell-free systems, it might act as a noncompetitive inhibitor of the protein carboxyl-O-methyltransferase which methylates the Asp or Glu residue in a large number of proteins. Oligosaccharide-linked ACP is a weak inhibitor of methylation *in vitro*, however, can significantly inhibit the growth of various cancer cell lines including NIH3T3, H-ras-transformed NIH3T3, MDA-MB-231, HT-1376, and AGS. In addition, exposure of H-ras-transformed NIH3T3 with oligosaccharide-linked ACP caused cell cycle arrest at S phase and subsequently cumulative increase of cells at G₀/G₁ phase determined by flow cytometry. Study of this transmethylator inhibitor could be a useful tool for elucidating regulation mechanism of methylation on cell growth.

[PC1-15] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Nitric Oxide inhibits the release of GPI-anchored renal dipeptidase via