

prevent the DNA-binding activity of NF- κ B assessed by electrophoretic mobility shift assay as well as the induced-degradation of I κ B- α protein by LPS or TNF- α . Further analysis revealed that these compounds dose-dependently suppressed the transactivation activity of RelA. Consistently, MNSA and MNSB inhibited the induced expression of NF- κ B target genes such as iNOS and Bfl-1/A1. Taken together, our results suggest that lignoids from *Saururus chinensis* suppress NF- κ B activation by inhibiting transactivation activity of RelA subunit.

[PC1-18] [10/19/2001 (Fri) 09:00 - 12:00 / Hall D]

A New Class of Secretory Phospholipase A₂-IIA Inhibitor, Papyriflavonol A from *Broussonetia papyrifera* inhibit PCA reaction

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Papyriflavonol A, a new prenylated flavonol isolated from *Broussonetia papyrifera*, strongly inhibited secretory human recombinant phospholipase A₂. Papyriflavonol A inhibited secretory human recombinant phospholipase A₂-IIA, V (IC₅₀, about 3.96 and 4.45 μ M) as dose dependent manner. In addition, the inhibitory activity of papyriflavonol A is rather specific secretory human phospholipase A₂-IIA, V than phospholipase A₂ IB

(IC₅₀, about 100 μ M), X (IC₅₀, about 100 μ M). Addition of excess Ca²⁺ concentration up to 8 mM did not antagonize the inhibitory activity of papyriflavonol A. Reversibility was studied directly by dialysis method, the inhibition was irreversible against secretory phospholipase A₂-IIA. Moreover, papyriflavonol A (25 and 50 mg/kg) significantly inhibited IgE induced passive cutaneous anaphylaxis (PCA) in rats. These results indicate that a new secretory phospholipase A₂-IIA, V inhibitor, papyriflavonol A can use as an anti-allergic agents.

[PC1-19] [10/19/2001 (Fri) 09:00 - 12:00 / Hall D]

Inhibitory effects of alpha-viniferin on iNOS, TNF and COX-2

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Alpha-viniferin is an oligomeric stilbene purified from the root of *Carex humilis* Leyss (Cyperaceae) as COX inhibitor. Inhibitory effects on iNOS, TNF and COX-2 have been evaluated in this study. Alpha-viniferin inhibited the TNF production with an IC₅₀ value of 9.8 μ M and the NO production with an IC₅₀ value of 5.8 μ M. The compound seems to inhibit the transcription of iNOS, which was identified by RT-PCR. Alpha-viniferin inhibited the COX-2 activity with an IC₅₀ value of 3.2 μ M, but did not inhibit the transcription of COX-2. The compound did not inhibit the IL-1 and TNF bioactivities. Alpha-viniferin showed anti-inflammatory activity on carrageenin-induced paw edema in mice and on adjuvant-induced rheumatoid arthritis in rats.

[PC1-20] [10/19/2001 (Fri) 09:00 - 12:00 / Hall D]