prevent the DNA-binding activity of NF-kB assessed by electrophoretic mobility shift assay as well as the induced-degradation of IkB-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-kB target genes such as iNOS and Bfl-1/A1. Taken together, our results suggest that lignoids from Saururus chinensis suppress NF-kB 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 A_2. Papyriflavonol A inhibited secretory human recombinant phospholpiase A_2- II A, V (IC_{50}, about 3.96 and 4.45 μM) as dose dependent manner. In addtion, the inhibitory activity of papyriflavonol A is rather specific secretory human phospholipase A_2- II A, V than phospholipase A_2 IB (IC_{50}, about 100 μM), X (IC_{50}, about 100 μM). Addition of excess Ca^{2+} 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 A_2- II A. Moreover, papyriflavonol A (25 and 50 mg/kg) significantly inhibited IgE induced passive cutaneous anphylaxis (PCA) in rats. These results indicate that a new secretory phospholipase A_2- II A, 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 uM and the NO production with an IC50 value of 5.8 uM. 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 uM, 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]