

72 to 144 sec and 19 to 27 sec, respectively. With 0.5 M NaCl eluted fraction, we observed prolongation in clotting time (aPTT) in a dose-dependent manner and approximately three times prolongation was obtained at 200 µg/150 µl.

[PC1-6] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Differentiation Inducer Activity of Magnolialide, a 1 β -Hydroxyeudesmanolide Isolated from *Cichorium intybus* on Human Leukemia Cells

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Cichorium intybus contained two 1 β -hydroxyeudesmanolides, magnolialide and artesin together with several constituents. Magnolialide exhibited a growth-inhibitory activity against several tumor cells and it appeared to induce differentiation of human leukemia HL-60 and U-937 cells to monocyte/macrophage-like cells. Another 1 β -hydroxyeudesmanolide, artesin, and other constituents were not active. The content of magnolialide was shown to be highest in the leaves of Inje cultivar among the investigated cultivars in this study.

[PC1-7] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Inhibitory effect of sophoricoside analogs on proinflammatory cytokines

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IL-5, IL-3 and GM-CSF are known to be involved in allergic inflammation, and their receptors are composed of ligand-specific alpha subunits associated with a common beta subunit. IL-1, TNF and IL-6 are well known as proinflammatory cytokines. Inhibitory effects of sophoricoside and its analogs (genistin, genistein and orobol), which were isolated from *S. japonica*, on the cytokine bioactivity have been investigated. Sophoricoside showed inhibitory effects on IL-5, IL-3 and IL-6 bioactivities but did not inhibit the GM-CSF, IL-1 and TNF bioactivities. Genistin inhibited the IL-5 and IL-3 bioactivities but not on the other cytokine bioactivities. Genistein and orobol showed inhibitory effects on IL-5, IL-3, GM-CSF and IL-6 bioactivities but did not inhibit the IL-1 and TNF bioactivities. Among the compounds, sophoricoside showed the highest inhibitory effects on IL-5, IL-3 and IL-6 bioactivities with IC₅₀ values of 1.9 µM, 6.9 µM and 6.0 µM, respectively and orobol did show on GM-CSF bioactivity with an IC₅₀ value of 18.0 µM. The result would provide an additional mechanism by which the compounds exert immunosuppressive and anti-inflammatory effects.

[PC1-8] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

NO Produced by iNOS Mediates KH-1-Induced Differentiation In a Human Neuroblastoma Cell Line SH-SY5Y