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**Validation of Analysis Methods of Decursin and Decursin angelate from Angelicae gigantis Radix by Reversed-phase Liquid Chromatography**

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The determination method of decursin and decursin angelate from Angelicae gigantis Radix, an important crude drug in oriental medicine, was developed and validated by a reverse-phase liquid chromatography. The decursin and decursin angelate, the structural isomer as pyranocoumarin each other, are the main organic constituents in Angelicae gigantis Radix. In this study, the method was developed using a RP-18 column, UV detector at 280 nm and 50 % acetonitril solution containing 0.01 M sodium dodecyl sulfate and 25 mM Sodium dihydrogen phosphate (pH 5.0) as the mobile phase. The procedure was validated by linearity (correlation coefficient = 0.9996, 0.9994), accuracy, robustness and intermediate precision. Also the method was applied to circulated Angelicae gigantis Radix in the herbal markets and concentration of decursin and decursin angelate of circulated samples were monitored with this method.

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**Anti-oxidant activities of the extracts from the herbs of Artemisia apiacea**

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The anti-oxidant activities of the various fractions from the herbs of Artemisia apiacea were investigated. The n-hexane and n-butanol fractions were found to cause significant free radical scavenging effects on DPPH, their scavenging potencies as indicated in IC50 values, being 230.1 and 183.7 mg/ml, respectively. The n-butanol fraction exhibited a significant decrease in serum transaminase activities elevated by hepatic damage induced by CCl4-intoxication in rats. All fractions tested exhibited a lipid peroxidation causing a significant decrease in MDA production in TBA-reactant assay. The n-butanol fraction was the strongest in the increase in the anti-oxidant enzymes such as hepatic cytosolic superoxide dismutase (SOD), catalase and glutathione peroxidase (GSH-px) activities in CCl4-intoxicated rats. These results suggest that the herbs of A. apiacea possess not only the anti-oxidant, but also the activities in CCl4-intoxicated rats. Especially, the n-butanol extract was found to cause significant increases in the rat liver cytosolic SOD, catalase, GSH-px activities as well as a significant decrease in the MDA production.

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**Profiling Analysis of Sphingolipids in HL-60 Cells by High-Performance Liquid Chromatography-Tandem Mass Spectrometry in combination with Multiple Reaction Monitoring**

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