

Purification and characterization of a novel lectin with high specificity for an N-glycolylneuraminic acid from hemolymph of *Philyra pisum*

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A sialic acid-binding lectin, PPA, has been purified from the hemolymph of *Philyra pisum*. SDS-PAGE, mass spectrometry, and carbohydrate analysis of the purified PPA showed that it is a glycoprotein with a molecular mass of about 28.9 kDa, and is composed of single subunit. PPA induced an agglutinating reaction in mouse, rat, and rabbit erythrocytes, but not in human ones. The agglutinating activity of PPA was inhibited selectively by 0.19 mM N-glycolylneuraminic acid, 1.3 μM bovine submaxillary mucin, and 0.4 μM thyroglobulin. The N-terminal amino acid sequence of PPA was determined as IVGGTEATA, which is highly heterogeneous compared to that of lectins obtained from other sources.

[PE3-6] [10/19/2001 (Fri) 09:00 - 12:00 / Hall D]

Purification and characterization of an N-acetylneuraminic acid-specific lectin from *Maackia fauriei*

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A lectin, MFA, composed of four subunits with each molecular mass of 30 kDa and demonstrating high homogeneity with the *Maackia amurensis* lectin, has been purified from *Maackia fauriei* by extraction with 0.15 M NaCl, gel-filtration chromatography using Sepharose CL-6B, and fetuin-affinity chromatography. The hemagglutination activity with human erythrocytes was specifically inhibited by 10.0 mM N-acetylneuraminic acid alone as a monosaccharide, and was also inhibited by 5.17 μM fetuin or 25.0 μM bovine submaxillary mucin which contains N-acetylneuraminic acid as a terminal component of oligosaccharide residues. This hemagglutination activity was independent of the presence of Ca²⁺ and Mn²⁺. In a comparison of cytotoxic effects on the MCF-7 breast cancer cell line, MFA was more effective than *Maackia amurensis* lectin.

Poster Presentations - Field F1. Clinical Pharmacy

[PF1-1] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Influence of kinds of food on absorption of itraconazole in healthy volunteers

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In most Asian countries, the indication and the use of drug follow the insert paper of the original pharmaceutical company, usually European or American. Itraconazole capsule are indicated to be taken after meal to enhance the absorption. Previous other studies showed that a fatty meal significantly