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## Characterization of a Neutral and an Acidic Polysaccharide Having Immunological Activities from the Root of *Paeonia lactiflora*\*

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A neutral and an acidic polysaccharide, called peonan SA and peonan SB, were isolated from the root of *Paeonia lactiflora* PALLAS. They were homogeneous on electrophoresis and gel chromatography, and their molecular masses were estimated to be  $11.2 \times 10^4$  and  $25.0 \times 10^4$ , respectively. Peonan SA is composed of L-arabinose : D-galactose : D-glucose in the molar ratio of 1 : 1 : 28, and peonan SB is composed of L-arabinose : D-galactose : D-galacturonic acid in the molar ratio of 4 : 3 : 2, in addition to small amounts of peptide moieties. About forty percent of the hexuronic acid residues in peonan SB exist as methyl esters. Reduction of carboxyl groups, methylation analysis, nuclear magnetic resonance and periodate oxidation studies indicated that their structural features include mainly 3,4- and 4,6-branched  $\alpha$ -D-glucan type units (peonan SA) and principally  $\alpha$ -1,5-linked L-arabino- $\beta$ -3,6-branched D-galactan type structural units (peonan SB). Both polysaccharides, especially in peonan SB, showed remarkable reticuloendothelial system-potentiating activity in a carbon clearance test and considerable anti-complementary activity.

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