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**Characterization of a Polysaccharide Having Activity on  
the Reticuloendothelial System from the Stolon  
of *Glycyrrhiza glabra* var. *glandulifera*\***

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An acidic polysaccharide, named glycyrrhizan GA, was isolated from the stolon of *Glycyrrhiza glabra* var. *glandulifera*. It produced a single band on electrophoresis and a single peak on gel chromatography, and its molecular mass was estimated to be 85,000.

Glycyrrhizan GA is composed of L-arabinose : D-galactose : L-rhamnose : D-galacturonic acid : D-glucuronic acid in the molar ratio of 22 : 10 : 1 : 2 : 1, in addition to small amounts of *O*-acetyl groups. Part of the hexuronic acid residues exist as methyl esters.

Chemical and spectroscopic studies indicated that the minimal unit of polysaccharide is composed of thirteen terminal  $\alpha$ -L-arabinofuranose, four  $\alpha$ -1,3-linked L-arabinofuranose, twenty-two  $\alpha$ -1,5-linked L-arabinofuranose, five  $\alpha$ -2,5-branched L-arabinofuranose, one  $\alpha$ -1,2-linked L-rhamnopyranose, one  $\alpha$ -2,4-branched L-rhamnopyranose, one terminal  $\beta$ -D-galactopyranose, six  $\beta$ -1,3-linked D-galactopyranose, three  $\beta$ -1,6-linked D-galactopyranose, ten  $\beta$ -3,6-branched D-galactopyranose, four  $\alpha$ -1,4-linked D-galactopyranosyluronic acid and terminal  $\beta$ -D-glucopyranosyluronic acid residues.

Glycyrrhizan GA showed remarkable reticuloendothelial system-potentiating activity in a carbon clearance test.

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