Title	An acidic polysaccharide having activity on the reticuloendothelial system from the root of astragalus mongholicus
Sub Title	
Author	清水, 訓子(Shimizu, Noriko) 友田, 正司(Tomoda, Masashi) 金成, 美枝子(Kanari, Mieko) 権田, 良子(Gonda, Ryoko)
Publisher	共立薬科大学
Publication year	1991
Jtitle	共立薬科大学研究年報 (The annual report of the Kyoritsu College of Pharmacy). No.36 (1991.) ,p.44- 44
JaLC DOI	
Abstract	
Notes	抄録
Genre	Technical Report
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00062898-00000036-0044

An Acidic Polysaccharide Having Activity on the Reticuloendothelial System from the Root of *Astragalus mongholicus**

Noriko SHIMIZU, Masashi TOMODA, Mieko KANARI and Ryōko GONDA

清水訓子，友田正司，金成美枝子，権田良子

The hot water extract of the root of *Astragalus mongholicus* was treated with cetyltrimethylammonium bromide. The supernatant obtained was successively purified by ethanol precipitation, ion-exchange, affinity and gel chromatographies on DEAE-Sephadex A-25, Con A-Sepharose and Toyopearl HW-60F columns. An acidic polysaccharide, designated as AMon-S, obtained was homogeneous on electrophoresis and gel chromatography, and its molecular mass was estimated to be 76,000. It is composed of L-arabinose : D-galactose : D-galacturonic acid : D-glucuronic acid in the molar ratio of 18 : 18 : 1 : 1, in addition to small amounts of *O*-acetyl groups and a peptide moiety. A part of the hexuronic acid residues exist as the methyl esters.

Chemical and spectroscopic studies elucidated that the minimal unit of polysaccharide is composed of nine terminal α-L-arabinofuranose, nine α-1,5-linked L-arabinofuranose, one terminal β-D-galactopyranose, five β-1,3-linked D-galactopyranose, one β-1,4-linked D-galactopyranose, one β-1,6-linked D-galactopyranose, ten β-3,6-branched D-galactopyranose, one α-1,4-linked D-galactopyranosyluronic acid and terminal β-D-glucopyranosyluronic acid residues. Thus AMon-S has mainly α-L-arabino-β-3,6-D-galactan type structure.

AMon-S showed significant reticuloendothelial system-potentiating activity in a carbon clearance test.

* 本報告は *Chem. Pharm. Bull.*, **39**, 2969—2972 (1991) に発表.