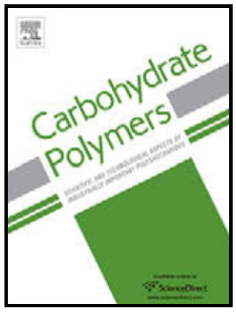

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Structural Analysis and Biological Activity of a Highly Regular Glycosaminoglycan from *Achatina fulica*

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Highlights

- A unique glycosaminoglycan (AF-GAG) was purified from *Achatina fulica*
- Uronic acid unit in the glycosaminoglycan is the fully epimerized and 2-*O*-sulfated
- The sequence of AF-GAG is highly regular →4)-α-D-GlcNAc (1→4)-α-L-IdoA2S (1→
- The GAG exhibits no anticoagulant activities differing from heparin-like compounds

Abstract

Edible snails have been widely used as a health food and medicine in many countries. A unique glycosaminoglycan (AF-GAG) was purified from *Achatina fulica*. Its structure was analyzed and characterized by chemical and instrumental methods, such as Fourier transform infrared spectroscopy, analysis of monosaccharide composition, and 1D/2D nuclear magnetic