PACHYMAN
CM-PACHYMAN

FOR RESEARCH PURPOSES ONLY

(1→3)-β-*D*-GLUCAN (ex *Poria cocus*) **Cat. No. 300-1**
***O*-CARBOXYMETHYLPACHYMAN (D.S.=0.31)** **Cat. No. 300-2**

CHEMICAL PROPERTIES

Pachyman

Pachyman is a (1→3)-β-D-glucan present in the water-insoluble fraction from the sclerotia of *Poria cocus*. The product is a chloroform/methanol (2:1 v/v) extracted preparation and contains predominantly glucose (98 % w/w) with a small amount of mannose. Linkage analysis by methylation shows that the glucosyl residues are primarily 3-linked (96 %) with small amounts of terminal (2 %), 6-linked (0.5 %), 2,3-linked (1 %) and 3,6-linked (1 %) residues.

Carboxymethylpachyman

CM-pachyman is the *O*-carboxymethyl ether of pachyman. CM-pachyman (D.S. = 0.31) dissolves readily in water to give a viscous solution (hsp = 5.50 at 0.25 % w/w) in aqueous 50mM sodium acetate buffer, pH5.5.

APPLICATIONS

The CM-pachyman can be used as a substrate for the assay of (1→3)-β-D-glucan hydrolases by reductometric and viscometric assays. Pachyman is also useful as a positive control in fluorescence microscopy studies of callose, using the aniline blue fluorochrome, Cat. No. 100-1.

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