



## LINEAR ARABINAN FROM BEET ARABINAN (Lot 80901)

11/99

### PREPARATION:

Linear arabinan is prepared by ion exchange chromatography of debranched arabinan to remove most of the charged pectic fraction. The non-bound fraction is concentrated and freeze-dried.

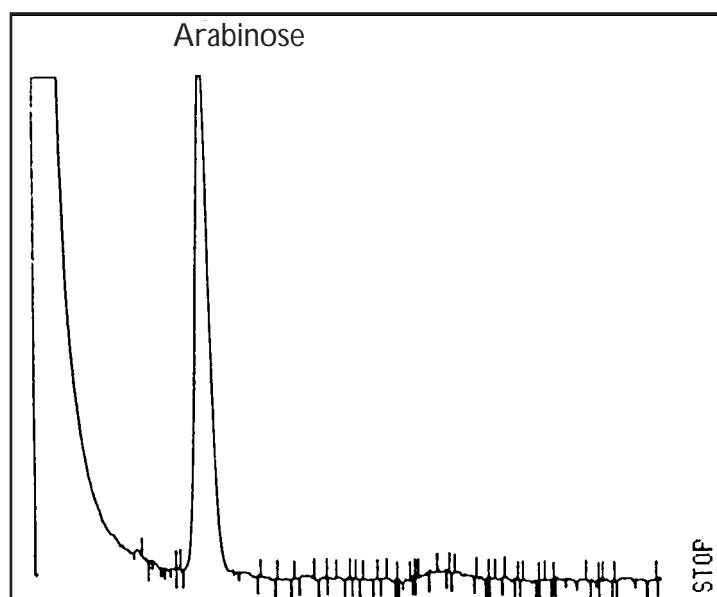
### PROPERTIES:

Protein content	:	0.3% (Nitrogen x 5.7)
Molecular weight	:	Approximately 18,000 Daltons.
Proton Resonance NMR:	:	Pattern is identical to that for linear arabinan from pear juice, and shows the absence of 1,3- $\alpha$ -linked L-arabinofuranosyl residues.
Physical description	:	odourless, pure white powder.
Solubility	:	Limited solubility in cold water. Dissolves in water at 70°C, but will precipitate from solution on storage at 4°C

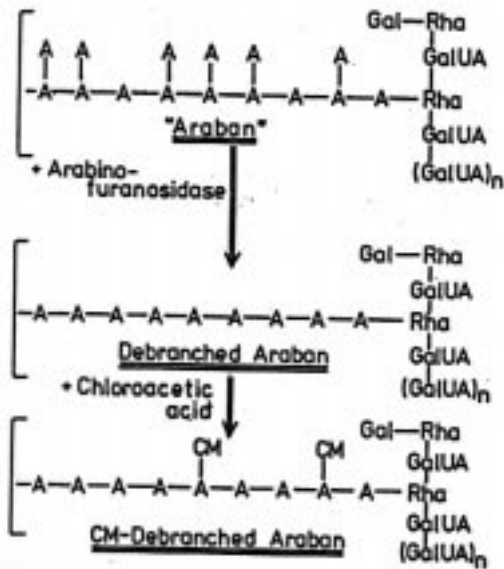
A typical sugar composition of linear arabinan is:

Arabinose: Galactose: Rhamnose: Galacturonic acid = 97.5 : 0.4 : 0.1 : 2.0.

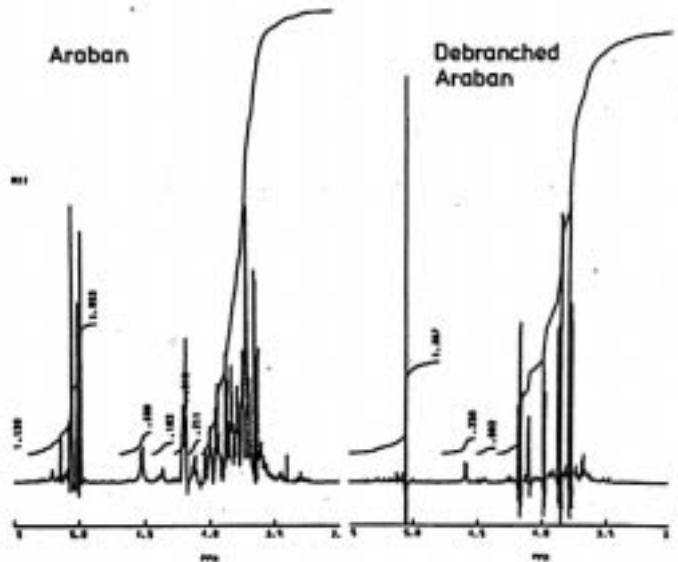
### Glc trace of alditol acetates:



**PREPARATION OF CM-DEBRANCHED ARABINAN**  
 (CM-LINEAR ARABINAN IS PREPARED BY THE  
 SAME METHOD BUT FROM LINEAR ARABINAN)

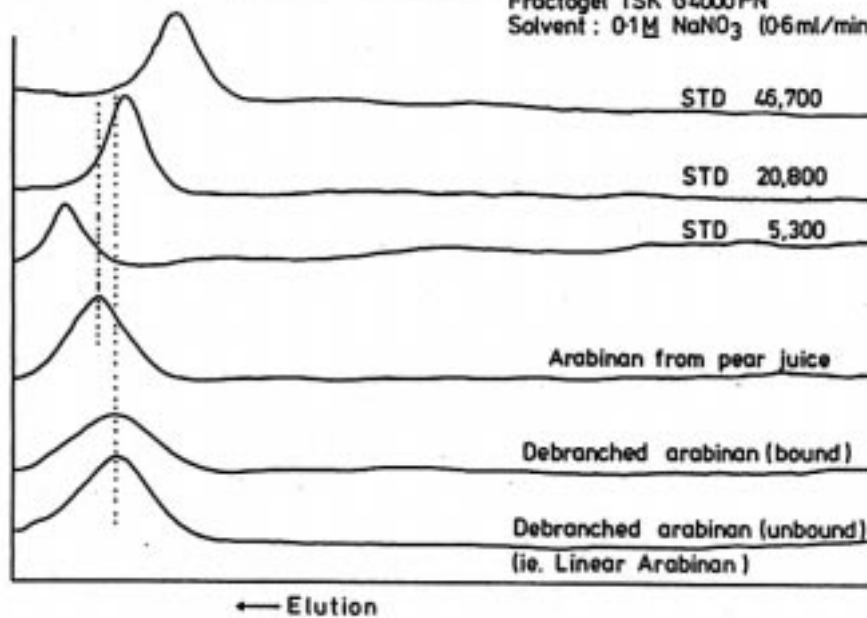


**PROTON RESONANCE NMR OF ARABINAN AND DEBRANCHED ARABINAN.**



**HPLC OF ARABINAN FRACTIONS**

Fractogel TSK G4000PN  
 Solvent: 0.1M NaNO<sub>3</sub> (0.6 ml/min)



Samples were bound or unbound on chromatography on Q-Sepharose Fast Flow.