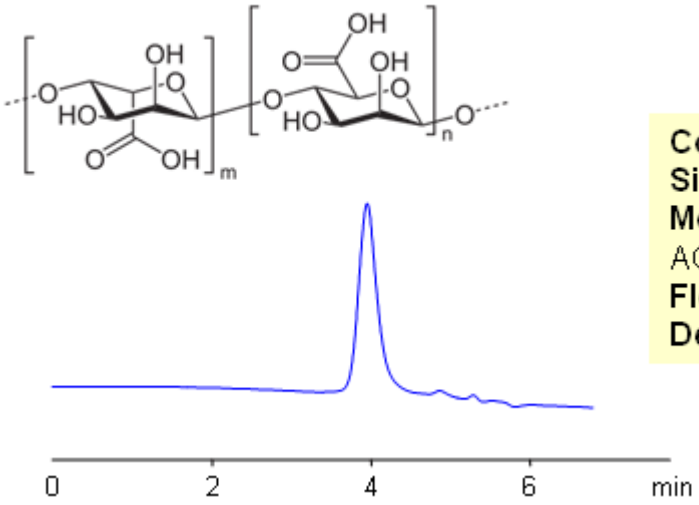
HPLC Analysis of Alginic Acid in Heartburn Tablets

https://sielc.com/Application-HPLC-Analysis-of-Alginic-Acid-in-Heartburn-Tablets

Chromatogram



Column: **Primesep C**
Size: 4.6 x 150 mm
Mobile phase:
ACN – 0%, Na2HPO4 pH 6.5 –20 mM
Flow: 0.25 mL/min
Detection: UV 210 nm

Description

Alginic acid is a linear copolymer with homopolymeric blocks of (1-4)-linked ?-D-mannuronate (M) and its C-5 epimer ?-L-guluronate (G) residues, respectively, covalently linked together in different sequences or blocks. The monomers can appear in homopolymeric blocks of consecutive G-residues (G-blocks), consecutive M-residues (M-blocks), alternating M and G-residues (MG-blocks), or randomly organized blocks. Molecular weight varies from 10,000 to 600,000. Analysis is a challenging task due to a wide distribution of molecular weights. Alginic acid analyzed in ion-exclusion and size exclusion mode on Primesep C mixed-mode cation exchange column. Alginic acid elutes before void as a single peak with good symmetry. Method can be used for quantitation of alginic acid in various formulation. Low UV or ELSD can be employed.