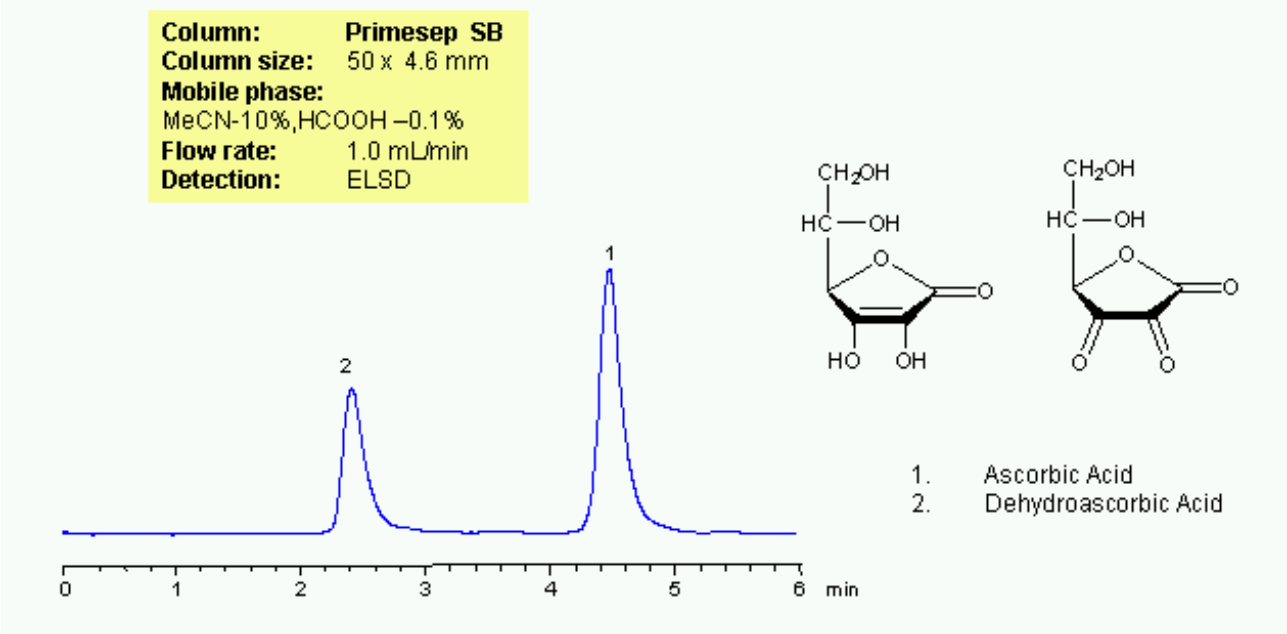
HPLC Separation of Ascorbic and Dehydroascorbic Acids



Ascorbic acid is a vital vitamin for humans. It also serves as an antioxidant. Dehydroascorbic acid is an oxidation product of ascorbic acid. Both molecules are very polar, and cannot be retained by reverse-phase mechanism. Generic method for HPLC separation of ascorbic and dehydroascorbic acid was developed on a Primesep SB mixed-mode HPLC column. Both compounds are well separated and produce excellent peak shape. Method can be used for analysis of both compounds in biofluids. Proteins from biofluids will not retain due to repulsion effect of the stationary phase. Compounds can be monitored by common detection techniques like UV, ELSD, CAD, and LC/MS.

Method Parameters

Column	Primesep SB , 4.6×50 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H2O
Buffer	Formic Acid
Flow Rate	1.0 mL/min
Detection	ELSD

Quelle: https://sielc.com/Application-HPLC-Separation-of-Ascorbic-and-Dehydroascorbic-Acids