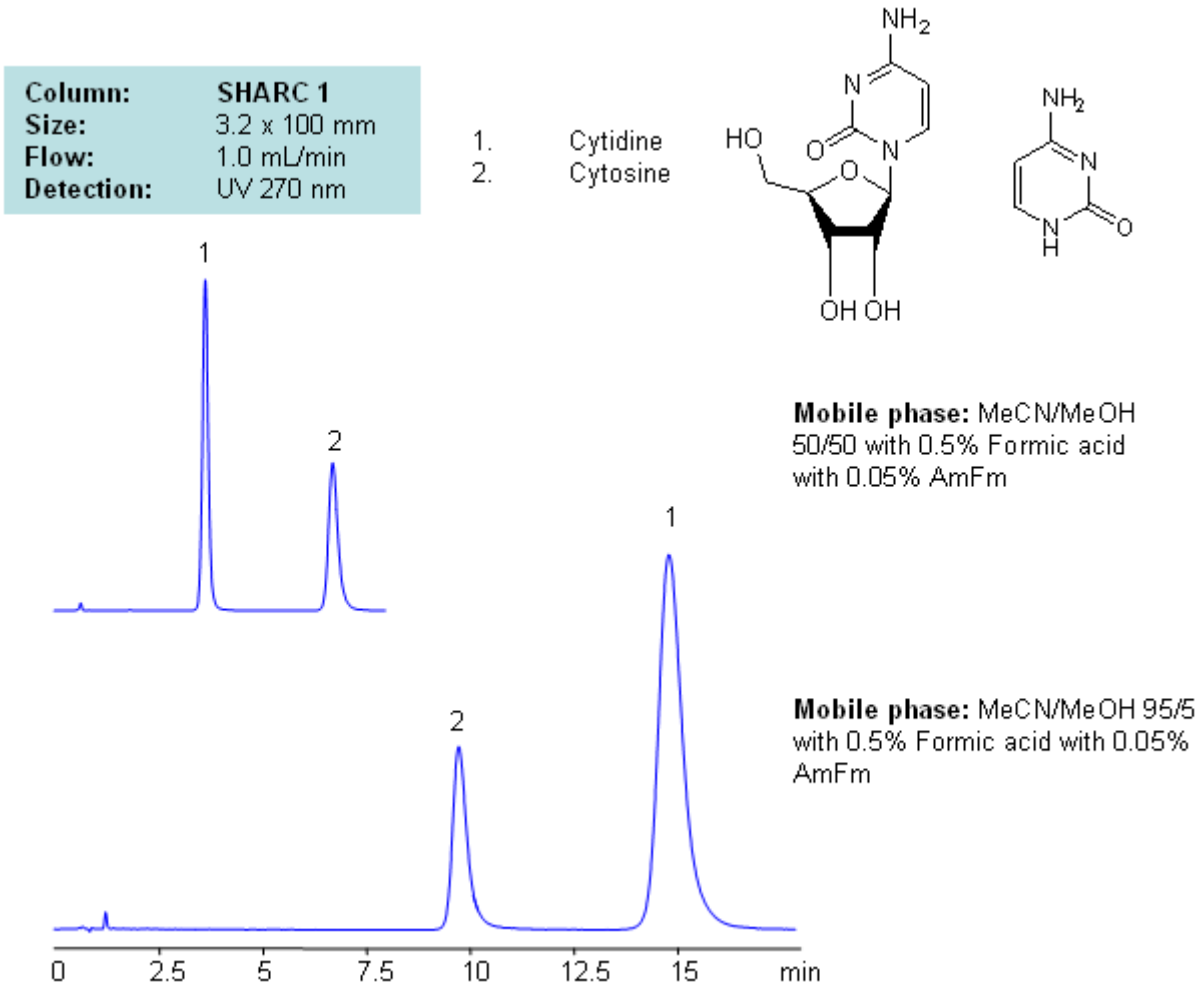
HPLC Separation of Cytidine and Cytosine Using the Hydrogen Bonding Method

https://sielc.com/Separation_of_Cytidine_and_Cytosine_Using_the_Hydrogen_Bonding_Method

Chromatogram



Description

Application Notes: Nucleosides glycosylamines consisting of nucleobase linked to ribose or deoxyribose sugar. Nucleoside are building blocks for DNA and RNA. These compounds are very polar in nature and contain groups available for hydrogen bonding interaction. A method for separation of cytosine and cytidine was developed based on the strong dependence of retention time to the mobile phase composition. The mobile phase consists of acetonitrile and methanol. Order of elution for compounds depends on the amount of acetonitrile and methanol. Our method is compatible with LC/MS and preparative chromatography, and can be used for separation of other nucleobases and nucleotides.

Application Columns: SHARC 1, 3.2×100 mm, 5 um, 100A. To learn more about SHARC 1 columns click here . To order this column click here . To see more chromatographic separations check our web site.

Application Compounds: Cytosine and Cytidine · Detection Technique: UV, LC/MS

Method Parameters

Mobile Phase	MeCN/MeOH
Buffer	AmFm, Formic acid

Flow Rate	1.0 ml/min
Detection	UV, 270 nm
Class of Compounds	Drug, Acid, Hydrophilic, Ionizable, Vitamin, Supplements
Analyzing Compounds	Cytidine, Cytosine

HPLC Column Used

Sharc 1, 3.2×100 mm, 5 µm, 100A

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