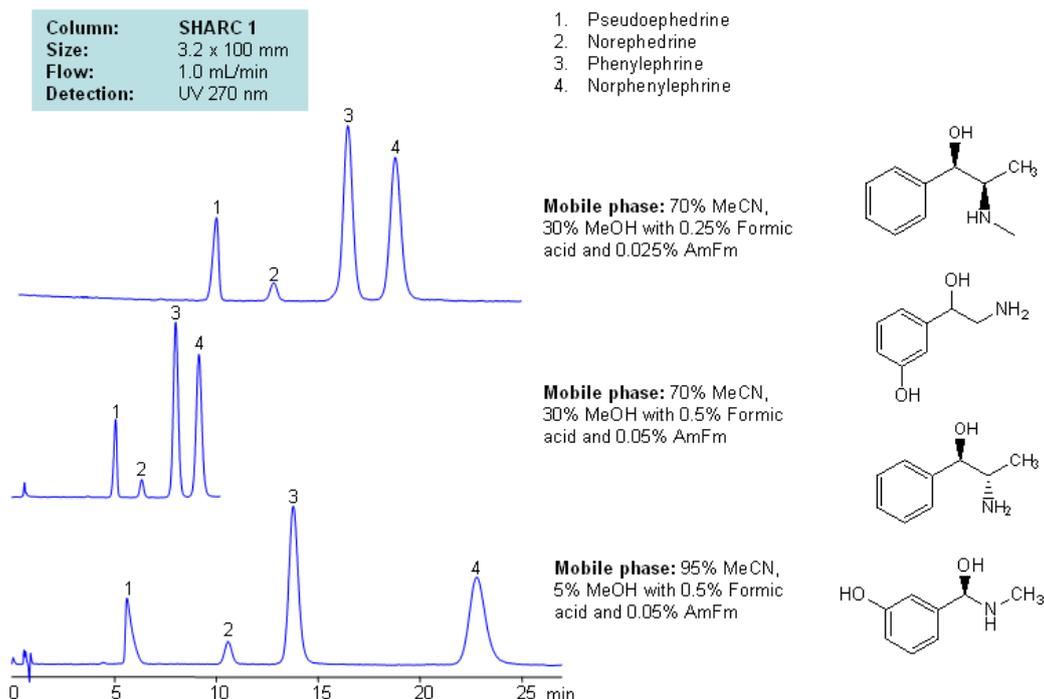


HPLC Separation of Pseudoephedrine, Norephedrine, Phenylephrine, and Norphenylephrine Using Hydrogen Bonding Mode



Application Notes : Neurotransmitters are polar basic compounds. Several HPLC techniques are used to analyze these hydrophilic molecules. The most common techniques are reversed-phase with ion-pairing reagents chromatography, ion chromatography, HILIC, and mixed-mode chromatography. SIELC developed a new approach of analysis, which is based on hydrogen bond interactions. Hydrogen-bonding offers unique and alternative selectivity to traditional approaches like reversed-phase, HILIC, ion-exchange, and mixed-mode chromatography. Our methods are fully compatible with ELSD, LC/MS and prep chromatography.

Application Columns : SHARC1, 3.2x100 mm, 5 μ m, 100 Å. To learn more about SHARC1 columns click [here](#) . To order this column click [here](#) . To see more chromatographic separations check our web site.

Application compounds : Pseudoephedrine, norephedrine, phenylephrine and norphenylephrine

Detection technique : UV, LC/MS

The SHARC™ family of innovative columns represents the first commercially available columns primarily utilizing separation based on hydrogen bonding. SHARC stands for Specific Hydrogen-bond Adsorption Resolution Column . Hydrogen bonding involves an interaction or attraction between a bound hydrogen atom and molecules containing electronegative atoms, such as oxygen, nitrogen, and fluorine.

Method Parameters

Column	Sharc 1, 3.2×100 mm, 5 µm, 100 Å
Mobile Phase	MeCN/MeOH
Buffer	AmFm, Formic acid
Flow Rate	1.0 mL/min
Detection	UV, 270 nm

Quelle: https://sielc.com/Separation_of_Pseudoephedrine_Norephedrine_Phenylephrine_and_Norphenylephrine