

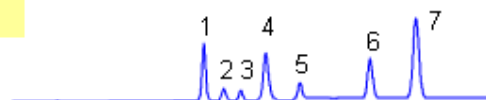
Comparison of the Separation of Polar Drugs on Obelisc R and Zorbax SB-AQ

<https://sielc.com/Application-Comparison-of-The-Separation-of-Polar-Drugs-on-Obelisc-R-and-Zorbax-SB-AQ>

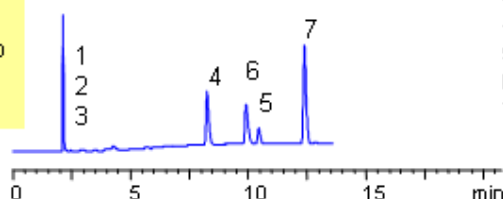
Chromatogram

Column: Obelisc R
Mobile phase: MeCN -45%, pH gradient AmAc pH 5.0 to AmAc pH 4.0 from 10 mm to 50 mm in 15 min, hold 10 min

Column size: 150 X 4.6
Flow: 1.0 mL/min
Detection: UV 270 nm



Column: Zorbax SB-AQ
Mobile phase: Gradient MeCN - 10-70%, pH gradient AmAc pH 5.0 to AmAc pH 4.0 from 10 mM to 50 mM in 15 min, hold 10 min



1. Norphenylephrine
2. Pseudoephedrine
3. Norephedrine
4. Doxylamine
5. Pyrilamine
6. Dextromethorphan
7. Trimipramine

Description

Common hydrophobic basic and hydrophilic basic drugs are separated by mixed-mode chromatography with greater selectivity and resolution than traditional reversed-phase column. Drugs are retained by combination of reversed-phase and cation-exchange mechanisms. Retention time is controlled by amount of acetonitrile, buffer concentration and buffer pH. Available detection techniques are based on buffer selection and include UV, Evaporative Light-Scattering Detector (ELSD), Corona (CAD), LC/MS, etc. This HPLC method can be adopted as general approach for analysis of drugs and pharmaceuticals.