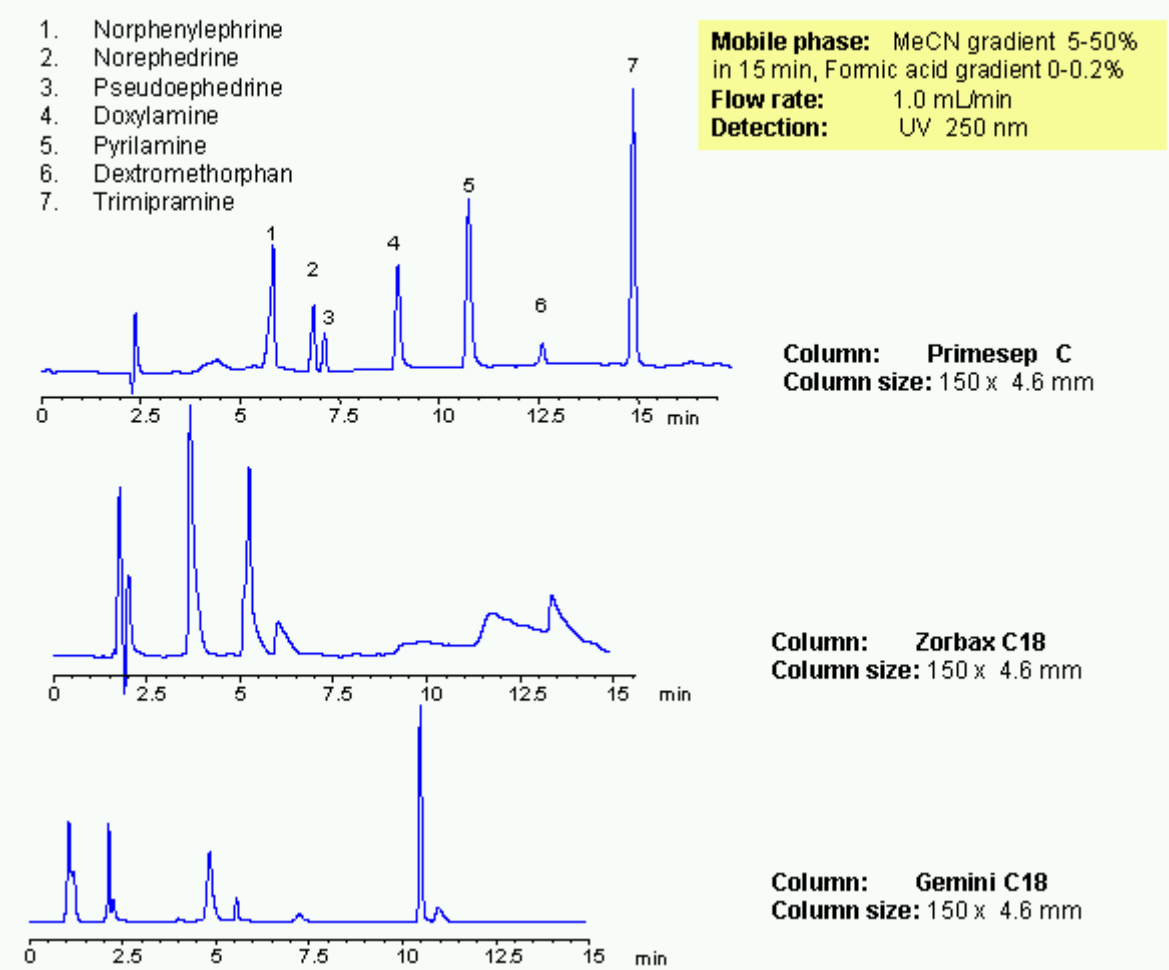
# HPLC Separation of Drugs

https://sielc.com/Application-HPLC-Separation-of-Drugs

## Chromatogram




## Description

Mixed-mode chromatography allows to separate various hydrophobic and hydrophilic drugs in one HPLC method. Presence of at least two mechanism of retention allows adjust selectivity of separation by changing three parameters: amount of acetonitrile, buffer concentration and buffer pH. Seven common drugs are separated on a Primesep C trimodal HPLC column in gradient method. Method provides alternative selectivity to traditional reversed-phase chromatography. Operational range in which basic compounds are retained the most is from pH 3 to 5. At higher pH, longer retention can be achieved. Mixed-mode chromatography provides longer retention and better peak shapes for basic and acidic analytes. Method can be used in analysis of drugs and pharmaceuticals.

## Method Parameters

| | |
|---|---|
| **Mobile Phase** | MeCN |
| **Buffer** | Formic Acid |
| **Flow Rate** | 1.0 ml/min |
| **Detection** | UV, 250 nm |
| **Class of Compounds** | Drug, Analgetic, Acid, Hydrophilic, Ionizable, |

| | |
|---|---|
| **Analyzing Compounds** | Norphenylephrine, Norephedrine, Pseudoephedrine, Doxylamine, Pyrilamine, Dextromethorphan, Trimipramine |

**HPLC Column Used**

**Primesep C, 4.6×150 mm, 5 µm, 100A**

Order this column at hplc-shop.de →