

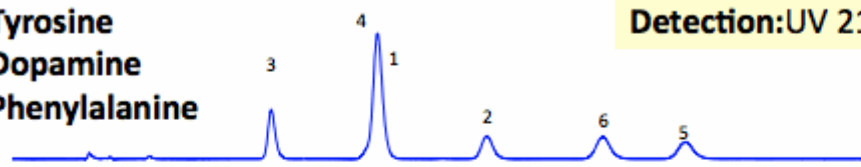
# HPLC Separation of Catecholamines on Primesep 100 Column with Phosphate Buffers

<https://sielc.com/Application-HPLC-Separation-of-Catecholamines-on-Primesep-100-Column-with-Phosphate-Buffers>

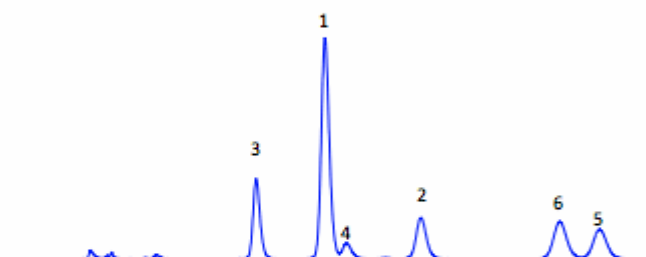
## Chromatogram

1. Norepinephrine
2. Epinephrine
3. DOPA
4. Tyrosine
5. Dopamine
6. Phenylalanine

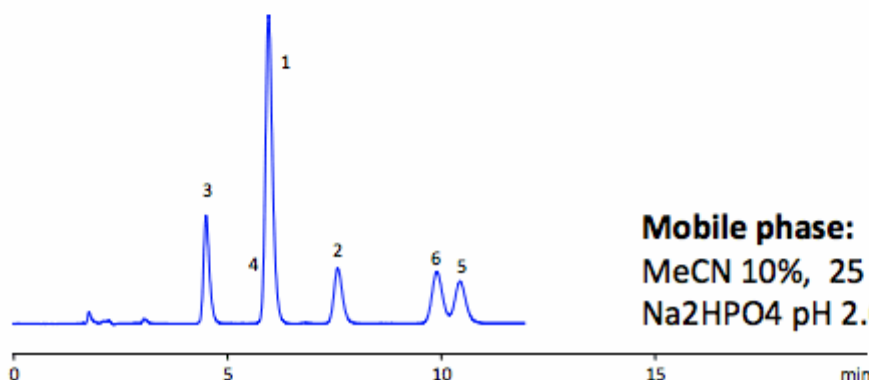
**Column: Primesep 100**  
**Size:** 4.6 x 150mm  
**Flow:** 1.0 mL/min  
**Detection:** UV 210 nm



**Mobile phase:**  
MeCN 10%, 15 mM  
Na<sub>2</sub>HPO<sub>4</sub> pH 2.0



**Mobile phase:**  
MeCN 10%, 20 mM  
Na<sub>2</sub>HPO<sub>4</sub> pH 2.0



**Mobile phase:**  
MeCN 10%, 25 mM  
Na<sub>2</sub>HPO<sub>4</sub> pH 2.0

chr\_284.gif

## Description

The catecholamine neurotransmitters are amino-acid derivatives of tyrosine. DOPA, tyrosine, phenylalanine, norepinephrine, epinephrine, and dopamine and baseline are resolved on a Primesep 100 column with UV-transparent phosphate buffer. This method can be used for analysis of catecholamines and related impurities in various matrices. Peak order and retention time can be changed by changing the amount of ACN, buffer concentration and buffer pH. Various buffers can be used to accommodate desired detection technique. Primesep 100 is a reversed-phase cation-exchange mixed-mode column that can be used for analysis of polar neutral, polar ionizable, polar zwitter-ionic, hydrophobic neutral, and hydrophobic ionic compounds in the same run. Column can be operated in reverse-phase, cation-exchange, anion-exclusion, HILIC and mixed-modes depending on the mobile phase selection and nature of analytes. Column is compatible with LC/MS and does not require use of ion-pairing reagents.

## Method Parameters

Mobile Phase

MeCN/H<sub>2</sub>O

<b>Buffer</b>	Na <sub>2</sub> HPO <sub>4</sub>
<b>Flow Rate</b>	1.0 ml/min
<b>Detection</b>	UV, 210 nm
<b>Class of Compounds</b>	Drug, Acid, Hydrophilic, Ionizable, Hormone
<b>Analyzing Compounds</b>	Tyrosine, DOPA, Phenylalanine, Norepinephrine, Epinephrine, Dopamine

#### HPLC Column Used

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

[Order this column at hplc-shop.de →](http://hplc-shop.de)