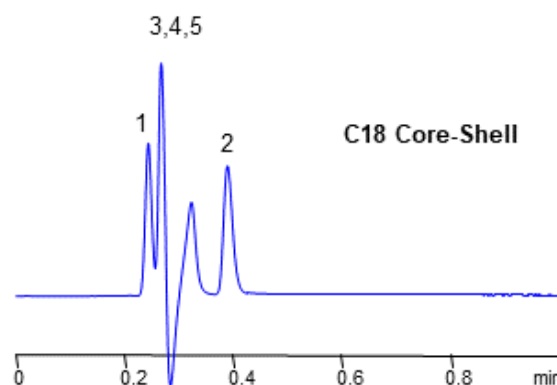
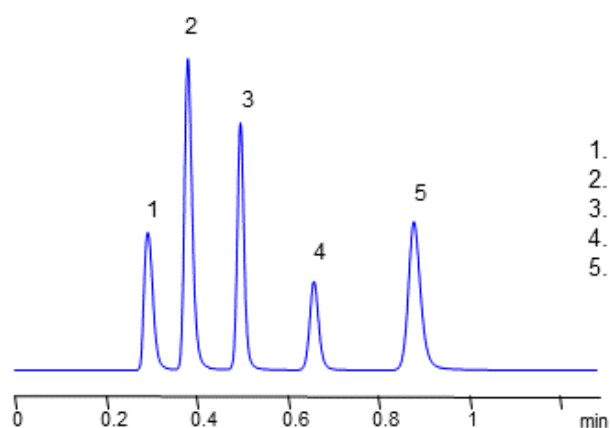


# Ultra-Fast Separation of Nucleobases on Coresep 100 Core-Shell HPLC Column in Reversed-Phase Mixed-Mode

## Application description

Nucleotide bases are parts of DNA and RNA. Adenine and guanine are purine-bases; uracil, thymine and cytosine are pyrimidine-bases. In the view of chromatography these compounds are very polar and similar in properties. It is impossible to retain and obtain base-line separation for this compounds on traditional reversed-phase core-shell column. In this application, nucleobases are well retained and separated on Coresep 100 core-shell mixed-mode column. Compounds are retained by weak reverse phase and weak ion-exchange mechanisms, but synergy of two mechanism provides efficient separation with excellent peak shape, symmetry and efficiency. All five compounds are separated within one minute. Method can utilize UV, ELSD, and LC/MS detection and can be applied for fast and efficient method using regular HPLC system.



[CORESEP 100 PURCHASE >](#)

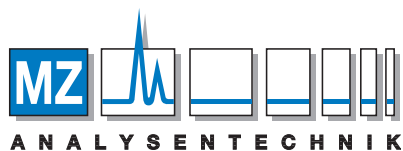
LEARN ABOUT CORESEP 100 >

## Conditions of Experiment

<b>Column:</b>	Coresep 100
<b>Separation Modes:</b>	reversed-phase and cation-exchange
<b>Column Dimenstions:</b>	3.2 x 100 mm, 2.7 um, 90A
<b>Mobile Phase:</b>	20% ACN with 0.1% TFA
<b>Detection:</b>	230 nm, ELSD
<b>Sample:</b>	0.3 mg/ml
<b>Injection:</b>	1 uL
<b>Flow rate:</b>	1 ml/min

## Analytes

<b>Class of compounds:</b>	Aromatic base, Nucleobase
<b>Nature of compounds:</b>	Basic, Hydrophilic, Neutral, Polar
<b>Compounds:</b>	Uracil, Thymine, Cytosine, Guanine, Adenine



### AUTHORIZED DISTRIBUTOR

MZ-Analysentechnik GmbH, Barcelona-Allee 17 • D-55129 Mainz

Tel +49 6131 880 96-0, Fax +49 6131 880 96-20

e-mail: [info@mz-at.de](mailto:info@mz-at.de), [www.mz-at.de](http://www.mz-at.de)

Copyright © 2017-2024 HELIX Chromatography. All rights reserved.

[Privacy Policy](#) [Terms of Use](#)

