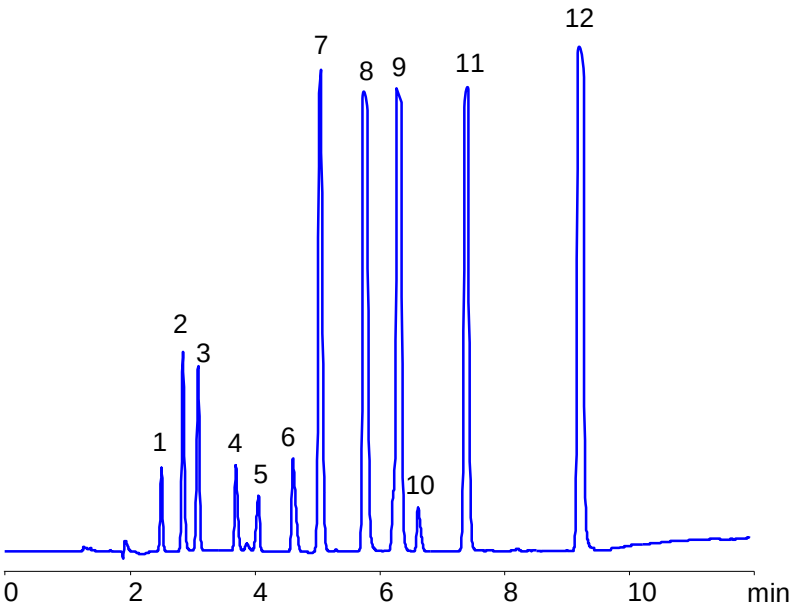
HPLC Separation of 12 Underivatized Amino Acids on Coresep 100 Mixed-Mode Column without Ion-Pairing Reagent

Column:	**Coresep 100**
Column size:	4.6x150 mm, 2.7 um, 90A
Mobile phase:	ACN/water/H_2SO_4 double gradient
Flow rate:	1 ml/min
Detection:	UV 220 nm



1. Serine
2. Cysteine
3. Alanine
4. 2-Aminobutyric acid
5. GABA
6. Valine
7. Methionine
8. Histidine
9. Tyrosine
10. Arginine
11. Phenylalanine
12. Tryptophan

Application Notes

Amino acids are important molecules that are used as food additives, supplements, and building blocks in synthesis of drugs, peptides and proteins and other compounds. Amino acids are polar and zwitterionic in nature. The usual approach for analysis of amino acids includes HILIC, ion-pairing reagents and derivatization.

We are offering you to review our mixed-mode application for the retention and separation of underivatized amino acids without the ion-pairing reagent. Coresep 100 columns have an ion-pairing reagent attached to the surface of core-shell ultra-pure silica gel. Amino acids are retained and separated by combination of reversed-phase and cation-exchange mechanisms.

Method can be used for analysis of underivatized amino acids by mixed-mode HPLC. Sulfuric acid can be replaced with other buffers and acids for MS-compatibility.

Mixed-mode chromatography offers a great alternative to Ion-Pairing RP and HILIC selectivity.