APPLICATION NOTE

YMC EUROPE GMBH

YMC-Triart C18: Amino acids with 100% aqueous mobile phase

For analysis of very polar compounds the option to work with 100% aqueous mobile phases is required. Only in the absence of added organic eluents can reasonable retention times be achieved as in the example of amino acid separation.

The proven aqueous stability of YMC-Triart C18 is a clear benefit when analysing polar target molecules!

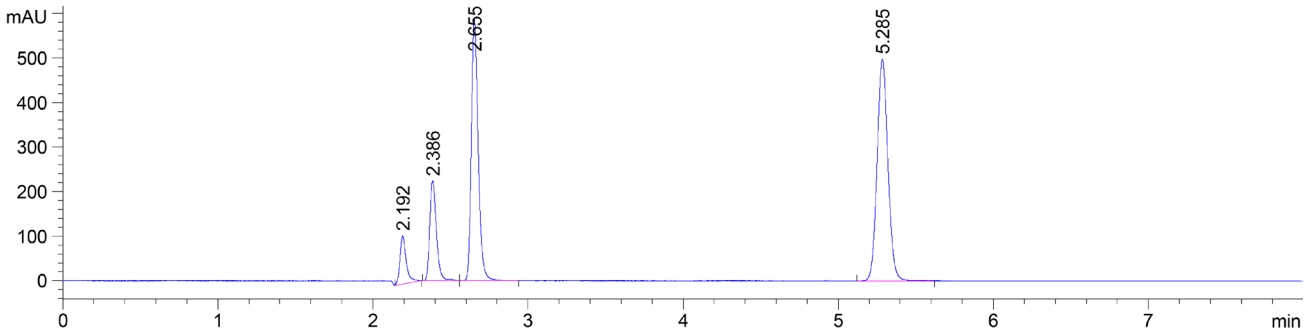
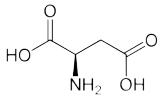
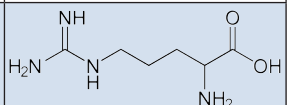
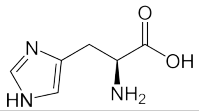
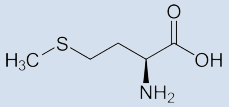


Figure 1: Separation of L-aspartic acid, L-arginine, L-histidine, L-methionine on YMC-Triart C18

Table 1: Method details

Column	YMC-Triart C18 1.9 µm, 150 x 3 mm ID
Part No.	TA12SP9-1503PT
Eluent	Isocratic 40 mM potassium phosphate pH 7.0
Flow rate	0.3 mL/min
Temperature	20°C
Detection	UV at 210 nm
Injection	2 µL, 1 mg/mL each

Table 2: Amino acids analysed

Retention time	Analyte	Structure
2.2 min	L-aspartic acid	
2.4 min	L-arginine	
2.7 min	L-histidine	
5.3 min	L-methionine	

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