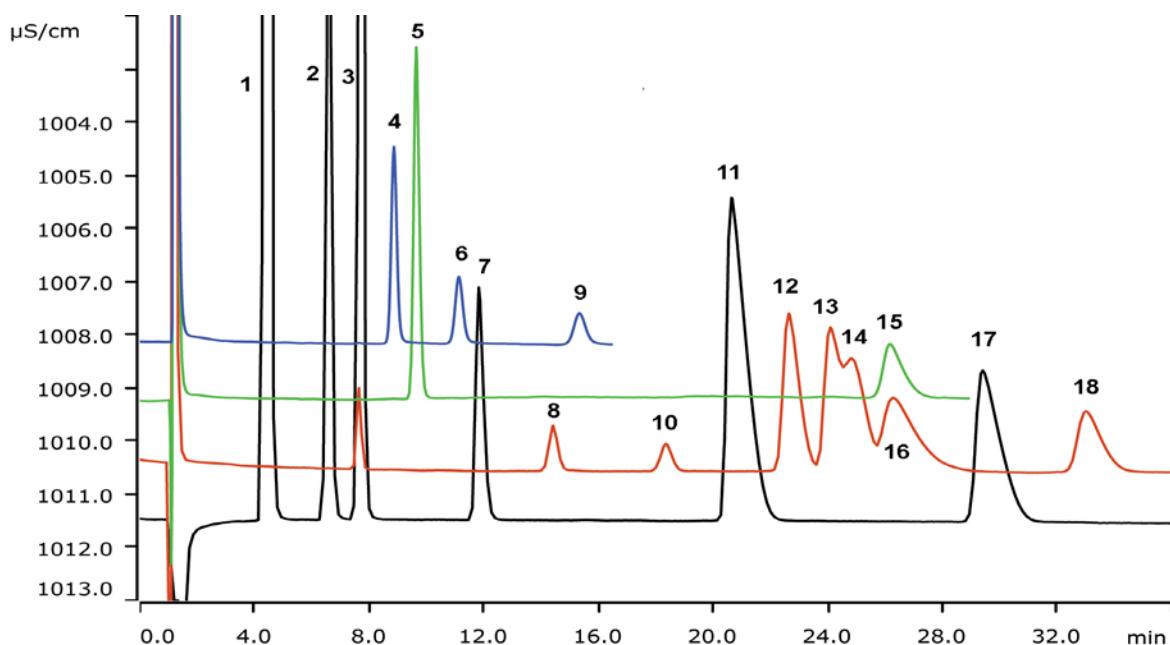


Selectivity of the high-capacity Metrosep C 6 - 150/4.0 cation column



The Metrosep C 6 - 150/4.0 high-capacity cation column impresses with excellent separations, narrow peaks as well as a high flexibility in eluent compositions. Here, the selectivity for alkali, alkaline earth, and some transition metals as well as for methylamines and ethanolamines is shown applying a nitric acid eluent and direct conductivity detection.

Results

Cations (10 mg/L)

1	Lithium	7	Potassium	13	Cobalt
2	Sodium	8	Rubidium	14	Zinc
3	Ammonium	9	Triethanolamine	15	Trimethylamine
4	Monoethanolamine	10	Cesium	16	Nickel
5	Monomethylamine	11	Calcium	17	Magnesium
6	Diethanolamine	12	Manganese	18	Cadmium

Sample

Standard solution

Sample preparation

None

Columns

Metrosep C 6 - 150/4.0	6.1051.420
Metrosep C 4 Guard/4.0	6.1050.500

Solutions

Eluent	3.0 mmol/L nitric acid
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Analysis

Direct conductivity detection

Instrumentation

930 Compact IC Flex Oven/Deg	2.930.2160
IC Conductivity Detector	2.850.9010
858 Professional Sample Processor	2.858.0020

Parameters

Flow rate	0.9 mL/min
Injection volume	20 µL
P _{max}	20 MPa
Recording time	36 min
Column temperature	30 °C

