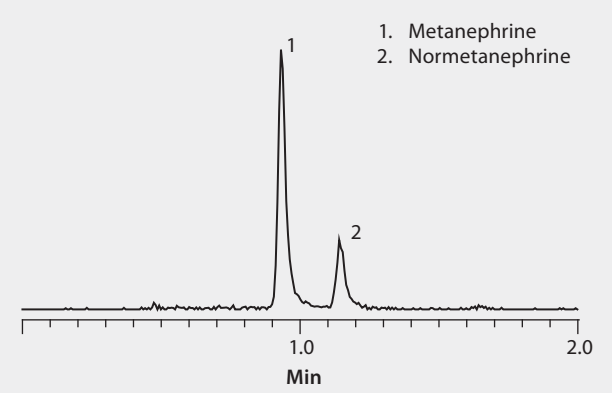
Email: techserv@sial.com

LC/MS (TOF) Analysis of Metanephrine and Normetanephrine in Urine on Ascentis® Express OH5 after Sold Phase Extraction (SPE) using Supel™-Select SCX

Metanephrine and normetanephrine are metabolites of epinephrine (adrenaline). Their urinary levels are used in the diagnosis of pheochromocytoma. Here, the analysis of metanephrine and normetanephrine in human urine samples was conducted using Supel-Select SCX to extract the compounds from urine followed by HILIC analysis using Ascentis Express OH5. Analytes were detected in MS/TOF by monitoring their water-loss ions. Fluka CHROMASOLV solvents provided clean, robust operation. Cerilliant CRMs provided reliable quantification.

market focus	Clinical
sample preparation	SPE (Solid Phase Extraction)
sample/matrix	human urine spiked at 20 ng/mL each analyte
SPE well plate	Supel-Select SCX 96-well plate, 30 mg/well (575664-U)
condition	1 mL 1% formic acid in acetonitrile, 1 mL water
sample addition	1 mL spiked urine
washing	2 mL water, 1 mL methanol:water (25:75)
elution	1 mL 10% ammonium hydroxide in acetonitrile
eluate post-treatment	evaporate and reconstitute in 1 mL acetonitrile
column	Ascentis Express OH5, 5 cm x 2.1 mm I.D., 2.7 µm particles (53749-U)
mobile phase	[A] 5 mM ammonium formate water; [B] 5 mM ammonium formate in acetonitrile; (15:85, A:B)
flow rate	0.3 mL/min
flow rate	35 °C
detector	LC/MS TOF, m/z180.1015, 166.0858
Application No.	G006382



Related Products

analytical column
Ascentis® Express OH5, 2.7 Micron HPLC Column (Supelco 53749-U)
mobile phase component
Acetonitrile (Fluka 14261)
Ammonium formate (Fluka 14266)
Water (Fluka 14263)
SPE tube or plate
Supel™-Select SCX SPE 96-well Plate (Supelco 575664-U)
standard
Catecholamine Mix 2 (Metanephrines) solution (Cerilliant C-110)