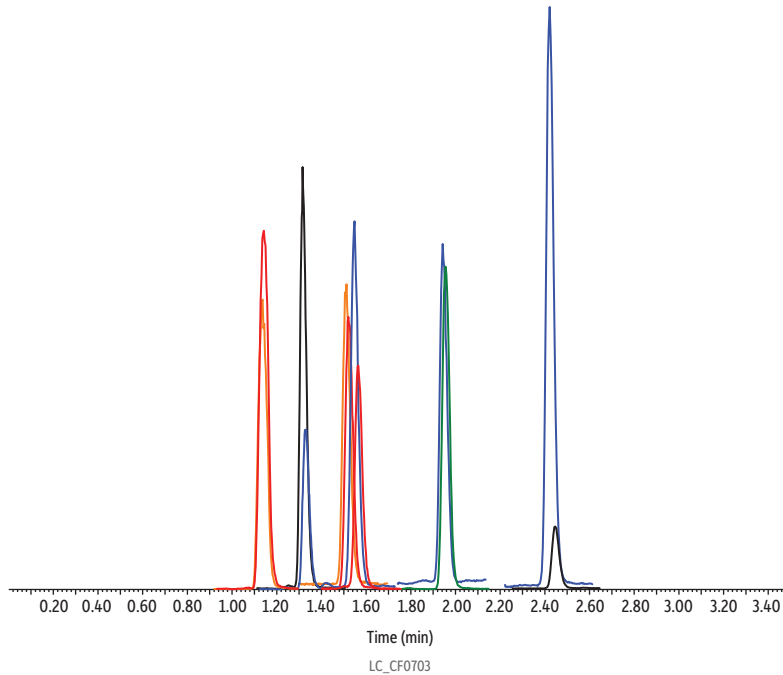


Catecholamines and Metabolites in Human Urine on Raptor Biphenyl by LC-MS/MS



Peaks	tr (min)	Precursor Ion	Product Ion
1. Norepinephrine-d6	1.14	158.16	111.26
2. Norepinephrine	1.14	152.07	106.91
3. Epinephrine-d6	1.32	172.16	111.86
4. Epinephrine	1.33	166.07	135.00
5. Normetanephrine-d3	1.51	169.00	136.96
6. Normetanephrine	1.52	166.00	148.99
7. Dopamine-d4	1.55	141.16	94.69
8. Dopamine	1.56	136.97	64.66
9. Metanephrine-d3	1.94	183.00	151.15
10. Metanephrine	1.96	179.94	165.01
11. 3-Methoxytyramine-d4	2.42	155.07	122.93
12. 3-Methoxytyramine	2.45	151.00	91.02

Column Raptor Biphenyl (cat.# 9309A62)
Dimensions: 150 mm x 2.1 mm ID
Particle Size: 2.7 µm
Pore Size: 90 Å
Temp.: 30 °C

Sample
Conc.: Endogenous level
Inj. Vol.: 2 µL

Mobile Phase
A: Water, 0.2% formic acid
B: Methanol, 0.2% formic acid

Time (min)	Flow (mL/min)	%A	%B
0.00	0.3	95	5
2.50	0.3	75	25
3.00	0.3	5	95
3.01	0.3	95	5
5.00	0.3	95	5

Detector MS/MS
Ion Mode: ESI+
Mode: MRM
Instrument UHPLC

Notes
Solid Phase Extraction Procedure:
 A 200 µL aliquot of urine sample (Bio-Rad Lyphochek quantitative urine control, normal level) was mixed with 10 µL (1 µg/mL in methanol) internal standard solution and 600 µL of 250 mM ammonium acetate solution. The mixture was loaded onto the EVOLUTE EXPRESS WCX 96-well plate (30 mg), washed with 1 mL water and 1 mL methanol:acetonitrile (60:40), eluted with 200 µL of 5% formic acid in water:methanol (95:5), and injected (2 µL) for analysis.