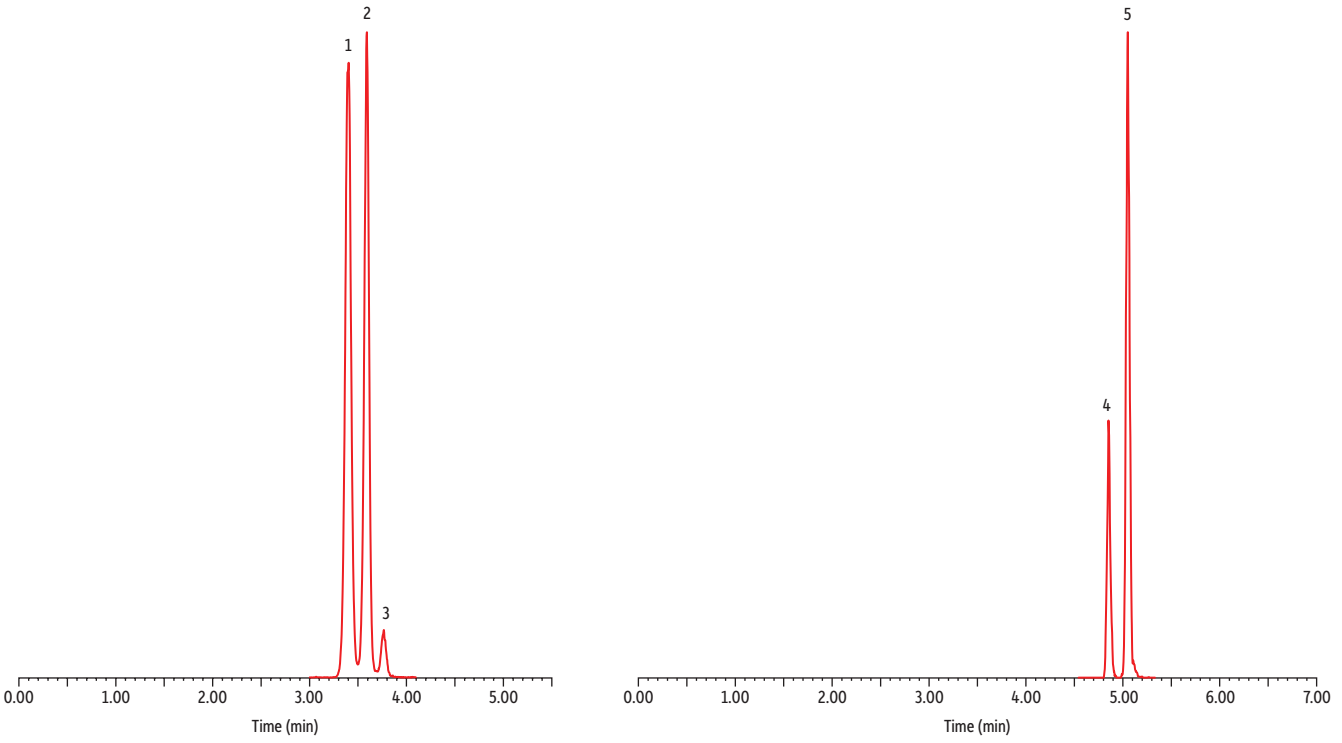
Separation of Leucine/Isoleucine/Alloisoleucine and Alanine/Sarcosine Isomers on Raptor Polar X

- Separates leucine/isoleucine/alloisoleucine and alanine/sarcosine isomers.
- Simple sample preparation without derivatization.
- Fast chromatographic cycling time.



LC_CF0768

Peaks	t_R (min)	Precursor Ion	Product Ion
1. Leucine	3.40	132.1	86.1
2. Isoleucine	3.59	132.1	86.1
3. Alloisoleucine	3.77	132.1	86.1
4. Alanine	4.85	90.0	44.1
5. Sarcosine	5.04	90.0	44.1

Column Raptor Polar X (cat.# 9311A12)
Dimensions: 100 mm x 2.1 mm ID
Particle Size: 2.7 µm
Pore Size: 90 Å
Guard Column: Raptor Polar X EXP guard column cartridge 5 mm, 2.1 mm ID, 2.7 µm (cat.# 9311A0252)
Temp.: 35 °C
Standard/Sample
Conc.: Endogenous Levels (~µmol/L)
Inj. Vol.: 5 µL
Mobile Phase
A: Water, 0.5% formic acid, 1 mM ammonium formate
B: 90:10 Acetonitrile:water, 0.5% formic acid, 1 mM ammonium formate

Time (min)	Flow (mL/min)	%A	%B
0.00	0.3	4	96
2.00	0.3	4	96
10.00	0.3	70	30
10.01	0.3	95	5
11.00	0.3	95	5
11.01	0.3	4	96
13.00	0.3	4	96

Detector MS/MS
Ion Mode: ESI+
Mode: MRM
Instrument UHPLC
Sample Preparation An aliquot of 50 µL of plasma (Control Plasma Level I, Chromsystems) was mixed with 5 µL of 30% sulfosalicylic acid solution for protein precipitation. Following centrifugation at 4200 rpm for 10 minutes, a 27.5 µL aliquot of clear supernatant was mixed with 2 µL of internal standard working solution and 225 µL of mobile phase B prior to LC-MS/MS analysis.