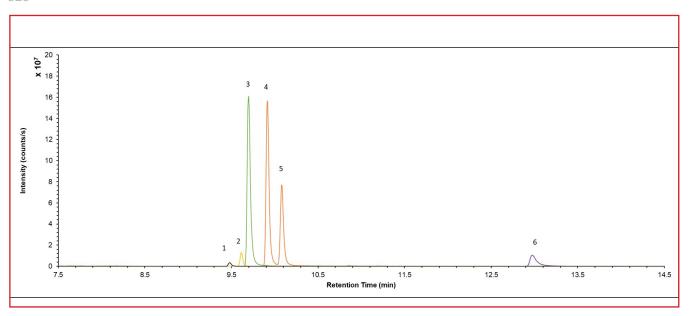
CLINICAL / TOXICOLOGY

HILIC Mode Separation of Polar Metabolites Using the novel HALO® 1.5 mm ID Penta-HILIC Column



TEST CONDITIONS:

Column: HALO 90 Å Penta-HILIC 2.7 µm 1.5 x 150 mm

Part Number: 9281X-705

Mobile Phase A: 8 mM ammonium formate, pH 4.0 (aq.), in

50:50 acetonitrile:water

Mobile Phase B: 8 mM ammonium formate, pH 4.0 (aq.), in

95:5 acetonitrile:water

Gradient:	Time	%В
	0.0	100
	3.0	100
	17.0	0
	20.0	0
	20.5	100

Flow Rate: 0.15 mL/min Temperature: 45 °C Injection Volume: 1 μL

Sample Solvent: 90/10 ACN/10mM Ammonium

Acetate pH 4

LC System: Shimadzu Nexera X2

PEAK IDENTITIES:

- 1. Niacin
- 2. Tryptophan
- 3. Phenylalanine
- 4. Leucine
- 5. Isoleucine
- 6. Arginine

MS CONDITIONS:

System: ThermoFisher Q Exactive HF Hybrid

Orbitrap

Spray Voltage (kV): 3.2

Capillary Temperature: 350 °C

Sheath gas: 35 Aux gas: 15 RF lens: 40

Metabolites from a yeast extract were separated using a HALO $^{\circ}$ 1.5 mm ID Penta-HILIC, 2.7 μ m column. Baseline resolution of the isomeric compounds leucine and isoleucine was obtained. By using a 1.5 mm ID column, 50% less solvent is used compared to running on a 2.1 mm ID column.



