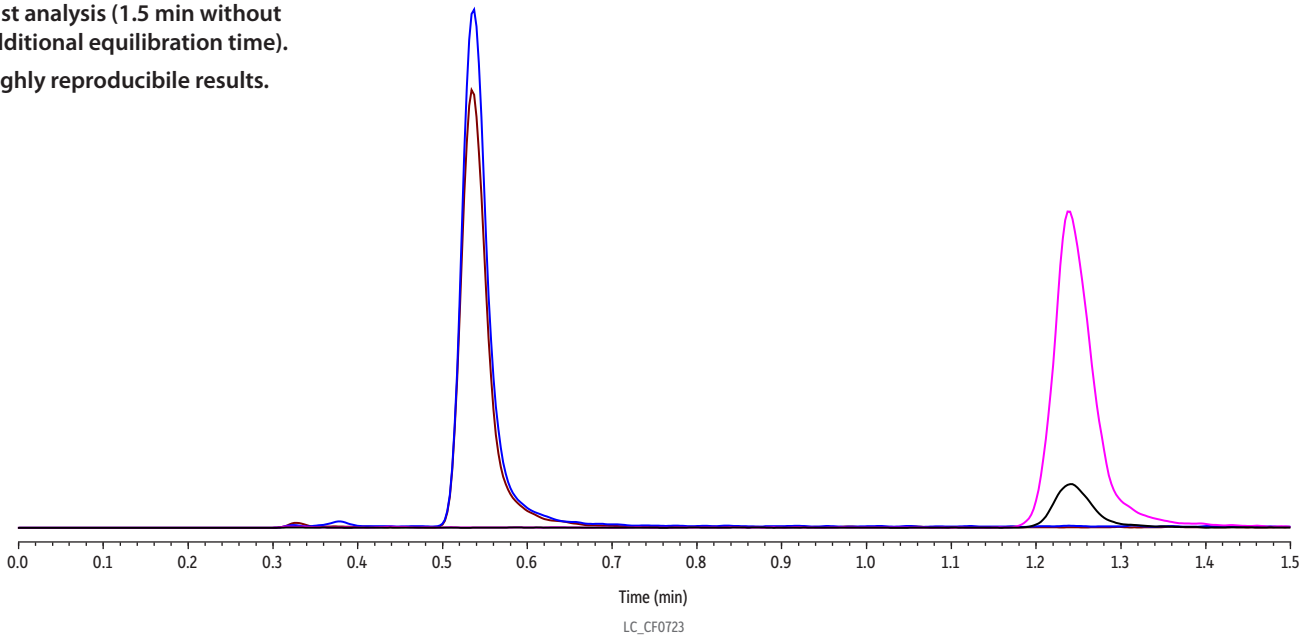
Creatine and Creatinine in Human Urine on Raptor HILIC-Si by LC-MS/MS

- Simple method (isocratic).
- Fast analysis (1.5 min without additional equilibration time).
- Highly reproducibile results.



Peaks	t_R (min)	Precursor Ion	Product Ion	Product Ion
1. Creatinine	0.537	114.0	44.3	86.0
2. Creatine	1.240	132.1	43.3	90.2

Column	Raptor HILIC-Si (cat.# 9310A52)
Dimensions:	50 mm x 2.1 mm ID
Particle Size:	2.7 µm
Pore Size:	90 Å
Guard Column:	UltraShield UHPLC precolumn filter 0.2 µm (cat.# 25810)
Temp.:	40 °C
Standard/Sample	
Diluent:	20:80 Water:acetonitrile
Conc.:	Endogenous levels
Inj. Vol.:	0.2 µL
Mobile Phase	
A:	5 mM Ammonium formate in 20:80 water:acetonitrile

Time (min)	Flow (mL/min)	%A
0.00	0.5	100
1.5	Stop	

Detector	MS/MS
Ion Mode:	ESI+
Mode:	MRM
Instrument	UHPLC
Sample Preparation	Endogenous levels of creatinine and creatine in human urine were determined using a simple dilute-and-shoot method. A 50 µL aliquot of human urine was mixed with 950 µL acetonitrile. After vortexing and centrifuging at 4300 rpm for 10 min, 10 µL of the supernatant was added to the 1490 µL of 80% acetonitrile in water. Centrifugation was performed again before injection.