Waters
THE SCIENCE OF WHAT'S POSSIBLE.™

APPLICATION HIGHLIGHT: ACQUITY UPLC Analysis of Histidine Dipeptides

CLICK ON THE UNDERLINED BLUE TEXT FOR DETAILS ON THE PRODUCTS USED IN THIS APPLICATION

TEST CONDITIONS

Chromatographic Conditions

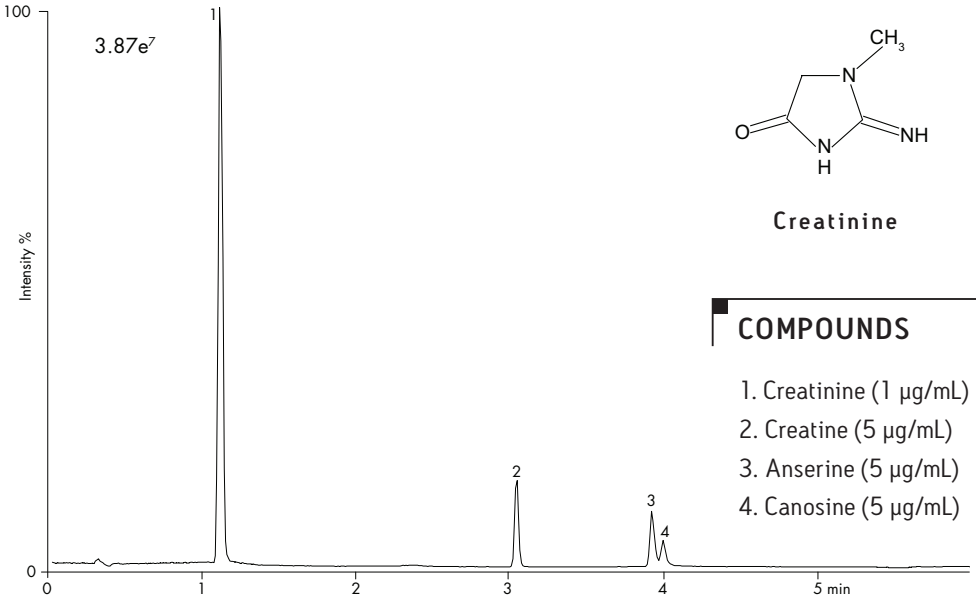
Column:	ACQUITY UPLC® BEH Amide, 2.1 x 50 mm, 1.7 µm
Part Number:	186004800
Mobile Phase A:	50/50 MeCN/H_2O with 10 mM CH_3COONH_z and 0.04 % NH_4OH, pH 9.0
Mobile Phase B:	95/5 MeCN/H_2O with 10 mM CH_3COONH_4 and 0.04 % NH_4OH, pH 9.0
Flow Rate:	0.5 mL/min
Gradient:	

Time (min)	Profile %A	%B
Initial	0.1	99.9
5.00	65.0	35.0
5.01	0.1	99.9
6.00	0.1	99.9

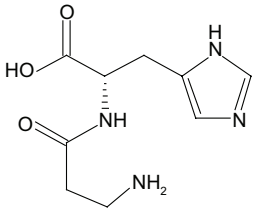
Injection Volume:	5 µL
Sample Diluent:	75/25 MeCN/MeOH
Column Temperature:	65 °C
Weak Needle Wash:	95/5 MeCN/H_2O
Instrument:	Waters ACQUITY UPLC with ACQUITY SQD

Mass Spectrometer Settings

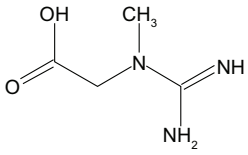
Ionization Mode:	ES^+
Capillary:	2.5 KV
Cone:	20 V (Carnosine; Creatinine, Anserine); 25 V (Creatine)
Source Temperature:	120 °C
Desolvation Temperature:	400 °C
Desolvation Gas Flow:	800 L/Hr
Cone gas Flow:	5 L/Hr
SIR m/z:	227.1 (Carnosine); 132.1 (Creatine); 114.05 (Creatinine); 241.1(Anserine)
Dwell Time:	0.1 s



STRUCTURES

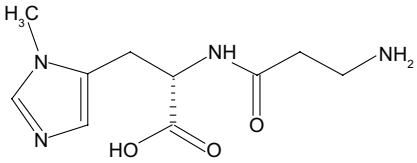


Carnosine



Creatine

Creatinine



Anserine

COMPOUNDS

1. Creatinine (1 µg/mL)
2. Creatine (5 µg/mL)
3. Anserine (5 µg/mL)
4. Canosine (5 µg/mL)

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