

Simultaneous analysis of metabolites using LC/MS/MS (2) - nucleobases and their related compounds part 1 -

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Conditions

Column	: InertSustain C18 (3 μ m, 150 x 2.1 mm I.D., Metal-free hardware)
Column Cat. No.	: 5020-00541
Eluent	: A) 10 mM Tributylamine + 15 mM CH ₃ COOH in H ₂ O B) CH ₃ OH
Flow rate	: 0.2 mL/min
Col. Temp.	: 45 °C
Detection	: LC/MS/MS (ESI, Negative, MRM)
Injection Vol.	: 3 μ L
Sample	: Standard solution (Approx. 5 μ mol/L each)

Time (min)	A (vol%)	B (vol%)
0	100	0
1	100	0
1.5	85	15
3	85	15
8	50	50
10	0	100
11	0	100
11.5	100	0
17	100	0

Analyte	Precursor ion (<i>m/z</i>)	Product ion (<i>m/z</i>)
Cytidine	302	242
Guanine	150	133
Xanthine	151	108
Uridine	303	243
Inosine	267	135
Thymine	125	42
Guanosine	282	133
Thymidine	301	241
NAD (oxidized form of nicotinamide adenine dinucleotide)	662	540
Orotic acid	155	111
CMP (cytidine monophosphate)	322	79
UMP (uridine monophosphate)	323	79
Acadesine 5'-monophosphate	337	79
GMP (guanosine monophosphate)	362	79
IMP (inosine monophosphate)	347	79
TMP (thymidine monophosphate)	321	195
AMP (adenosine monophosphate)	346	79
cAMP (3'-5'-cyclic adenosine monophosphate)	328	134
XMP (xanthosine monophosphate)	363	211

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