InertSearch™ for LC

Inertsil® Applications

Simultaneous analysis of metabolites using LC/MS/MS (3) - nucleobases and their related compounds part 2 -

Data No. LL013-0000

The chromatograms were provided by Yudai Dempo, Takeshi Bamba, and Eiichiro Fukusaki,
Department of Biotechnology, Graduate School of Engineering, Osaka University, 2-1 Yamadaoka, Suita, Osaka 565-0871, Japan

Conditions

Column : InertSustain C18 (3 µm, 150 x 2.1 mm I.D., Metal-free hardware)
Column Cat. No. : 5020-00541
Eluent : A) 10 mM Tributylamine + 15 mM CH_3COOH in H_2O
B) CH_3OH
Flow rate : 0.2 mL/min
Col. Temp. : 45 °C
Detection : LC/MS/MS (ESI, Negative, MRM)
Injection Vol. : 3 µL
Sample : Standard solution (Approx. 5 µmol/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 (*m/z*)	Product ion (*m/z*)
UDP-Glc (uridine diphosphate glucose)	565	323
CDP (cytidine diphosphate)	402	79
ADP-Glc (adenosine diphosphate glucose)	588	346
GDP (guanosine diphosphate)	442	79
UDP (uridine diphosphate)	403	159
NADH (reduced form of nicotinamide adenine dinucleotide)	664	346
NADP (oxidized form of nicotinamide adenine dinucleotide phosphate)	742	620
ADP (adenosine diphosphate)	426	79
GTP (guanosine triphosphate)	522	159
CTP (cytidine triphosphate)	482	159
UTP (uridine triphosphate)	483	159
ATP (adenosine triphosphate)	506	159
FAD (quinone form of flavin adenine dinucleotide)	784	346
NADPH (reduced form of nicotinamide adenine dinucleotide phosphate)	744	408
CoA (coenzyme A)	766	408
3-Hydroxybutyryl CoA	852	772
Malonyl CoA	852	808
Acetyl CoA	808	408
HMG CoA (3-hydroxy-3-methylglutaryl coenzyme A)	910	408
Succinyl CoA	866	408
Crotonyl CoA	834	408
Butyryl CoA	836	408

InertSearch™ for LC

Inertsil® Applications

Simultaneous analysis of metabolites using LC/MS/MS (3) - nucleobases and their related compounds part 2 -