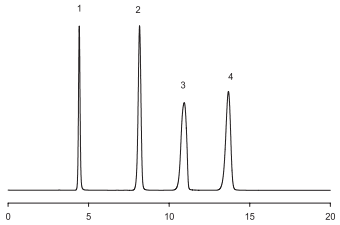
APPLICATIONS

7. Applications

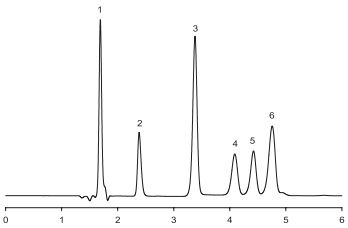
7-1. Biochemicals

Amino acids-Underivatized



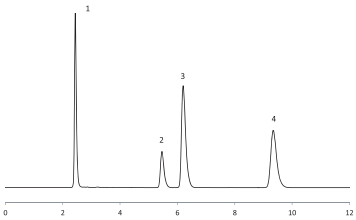
Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 20 mM KH_2PO_4 aq.
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Phenylalanine 2. Phenylglycine
3. 4-Fluorophenylalaine 4. Tryptophan

Amino acids-Underivatized



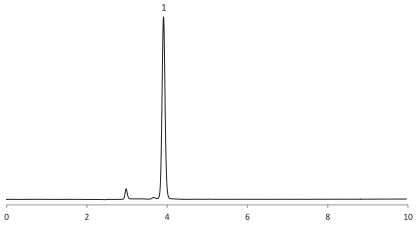
Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 20 mM KH_2PO_4 aq.
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Alanine 2. Valine 3. Methionine
4. Iso-leucine 5. Leucine 6. Nor-leucine

Amino acids



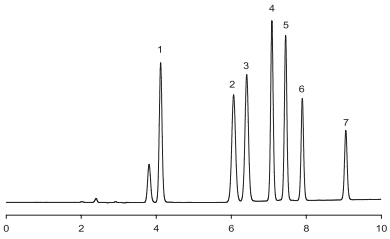
Column : Hector-M C18 5μm
Dimension : 250 X 4.6 mm
Mobile Phase : 10mM $HClO_4$ aq. / MeOH = 60 / 40
Flow rate : 1.0mL/min Detection : UV 210nm
Temperature : 35 °C Injection Volume : 10μL
Sample : 1. Pyridin-Phenylalanine
2. Homo-Phenylalanine
3. 4-Chloro-DL-Phenylalanine
4. 4-Phenyl-DL-Phenylalanine

DL-Norvaline



Column : Hector-A C18 5μm
Dimension : 250 X 4.6 mm
Mobile Phase : 20 mM NaH_2PO_4 aq.
Flow rate : 1.0 mL/min
Detection : UV 210 nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. DL-Norvaline

Amino acids, Fmoc-derivatives

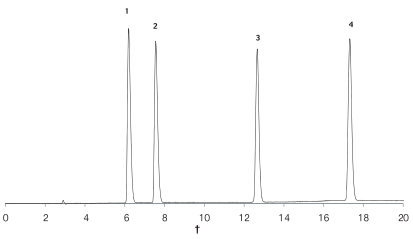


Column : Hector-T C18 5μm Dimension : 250 X 4.6mm
Mobile phase : A: 0.1 M Sodium acetate aq. (pH 4.4) / THF /
ACN =75 / 15 / 10 B: ACN / THF = 85 / 15
Gradient :

Time	0	3	4	10
% B	30	30	40	70

Flow rate : 1.0 ml/min Detection : UV 254nm
Temperature : 25 °C Injection Volume : 10μL
Sample : 1. Fmoc-proline 2. Fmoc-serine 3. Fmoc-tryptophane
4. Fmoc-leucine 5. Fmoc-arginine 6. Fmoc-tyrosine
7. Fmoc-histdine

β-blockers



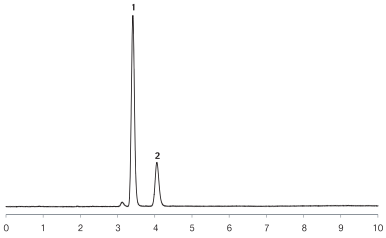
Column : Hector-M C18 5μm Dimension : 250 X 4.6mm
Mobile phase : A: 0.03% TFA aq. B: 0.03% TFA in ACN

Time	0	20
% B	30	50

Flow rate : 1.0 ml/min
Detection : UV 230nm
Temperature : 25 °C
Injection Volume : 5μL
Sample : 1. Pindolol 2. Metoprolol 3. Propranolol 4. Carvedilol

7-1. Biochemical

Cystein & D,L-ATC

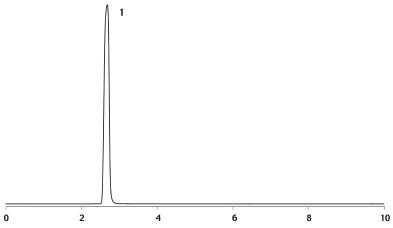


Column : Hector-M C18 5μm Dimension : 250 X 4.6mm
Mobile phase : A: 10 mM KH_2PO_4, K_2HPO_4 (pH7.1) B: ACN
Gradient :

Time	0	10	20
% B	0	3	60

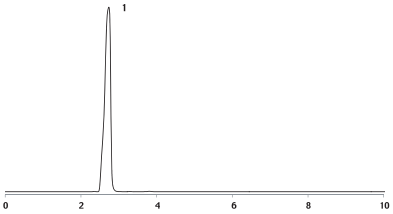
Flow rate : 1.0 ml/min Detection : UV 210nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Cystein 2. D,L-ATC

L-Histidin



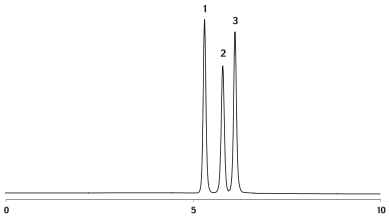
Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1 % H_3PO_4 aq.
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. L-Histidin

L-Pyroglutamic acid



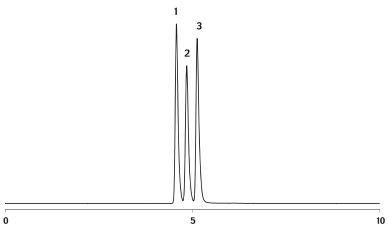
Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 10 mM KH_2PO_4 aq. / MeOH = 90 / 10
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. L-Pyroglutamic acid

Nucleic acid & base



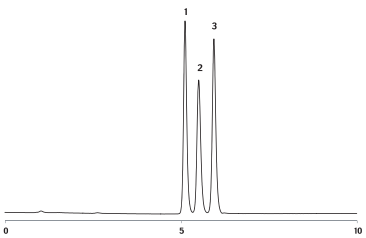
Column : Hector-M PN 5μm
Dimension : 250 X 4.6mm
Mobile phase : 10 mM KH_2PO_4 aq. / MeOH = 85 / 15
Flow rate : 0.5ml/min
Detection : UV 230nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Cytidin 2. Cytosine 3. Adenonin

Nucleic acid & base



Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 10 mM H_3PO_4 aq. / MeOH = 85 / 15
Flow rate : 0.5ml/min
Detection : UV 230nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Cytidin 2. Cytosine 3. Adenonin

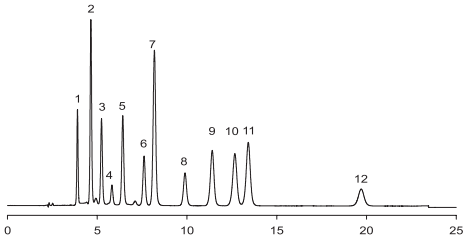
Nucleic acid & base



Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 10 mM H_3PO_4 aq. / MeOH = 85 / 15
Flow rate : 0.5ml/min
Detection : UV 230nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Cytidin 2. Cytosine 3. Adenonin

7-1. Biochemical

Nucleosides

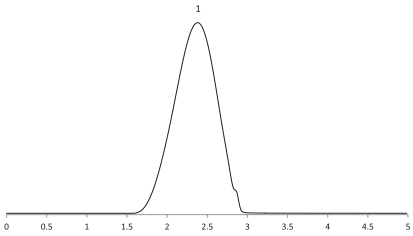


Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 30 mM $NH_4H_2PO_4$ aq.(pH5.3) / ACN = 98 / 2
Flow rate : 1.0ml/min
Detection : UV 254nm
Temperature : 25 °C
Injection Volume : 10μL

Sample : 1. β-Pseudouridine 25μg/ml
2. Cytidine 50μg/ml
3. 3-Methylcytidine methosulfate 100μg/ml
4. Uridine 25μg/ml
5. 1-Methyladenosine 25μg/ml
6. 2-Thiocytidine dihydrate 10μg/ml
7. 5-Methylcytidine 100μg/ml
8. 7-Methylguanosine 25μg/ml
9. 2'-O-Methylcytidine 20μg/ml
10. Inosine 25μg/ml
11. Guanosine 25μg/ml
12. 5-Methyluridine 100μg/ml

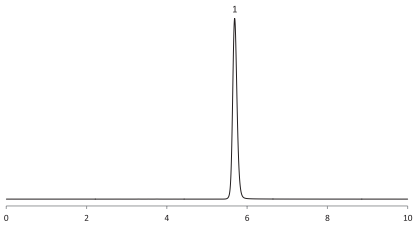
7-2. Cosmetics

Polysilicon-15



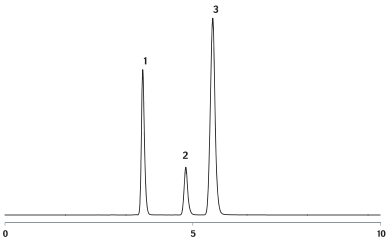
Column : Hector-W C18 5 μm
Dimension : 250 X 4.6mm
Mobile phase : THF
Flow rate : 1.0 ml/min
Detection : UV 310nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Polysilicon-15

Niacinamide



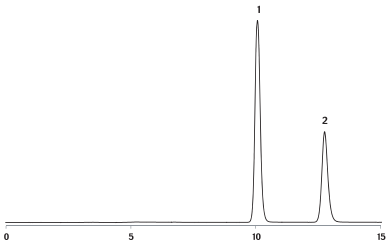
Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.05 M KH_2PO_4 (pH 7.0 with Sodium hydroxide) / MeOH = 75 / 25
Flow rate : 1ml/min
Detection : UV 263nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Niacinamide

Arbutin & Adenosine & Niacinamide



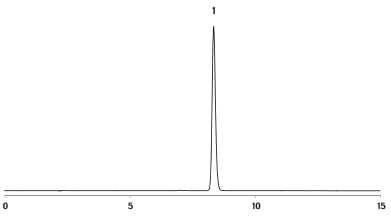
Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 10 mM KH_2PO_4 aq. / ACN = 92 / 8
Flow rate : 1.0ml/min
Detection : UV 280nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Arbutin 2. Niacinamide 3. Adenosine

Benzoic acid & Salicylic acid



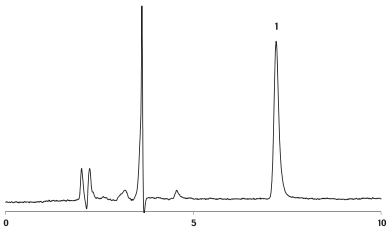
Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1 % H_3PO_4 aq. / ACN = 60 / 40
Flow rate : 0.7 ml/min
Detection : UV 225nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Salicylic acid 2. Benzoic acid

Dipotassium glycyrrhizate(DPG-K2)



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : Water / ACN = 70 / 30
Flow rate : 1.0 ml/min
Detection : UV 230nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. DPG-K2

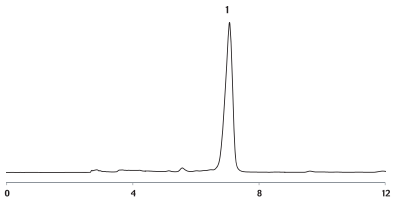
Hydroquinone



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 10 mM KH_2PO_4 aq. / ACN = 98 / 2
Flow rate : 1.0 ml/min
Detection : UV 280nm
Temperature : 25 °C
Injection Volume : 20μL
Sample : 1. Hydroquinone

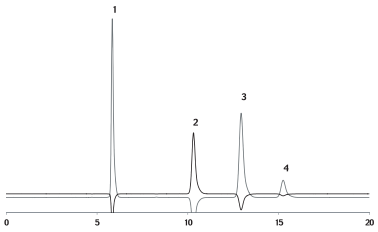
7-2. Cosmetics

Madecassic acid



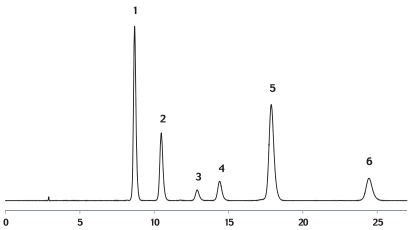
Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. / ACN = 40 / 60
Flow rate : 0.7 ml/min
Detection : UV 220nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Madecassic acid

Sun screen



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : ACN / Water = 85 / 15
Flow rate : 1.5 ml/min
Detection : UV 305, 360nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. IMC 2. DHHB (360 nm) 3. OMC 4. OS

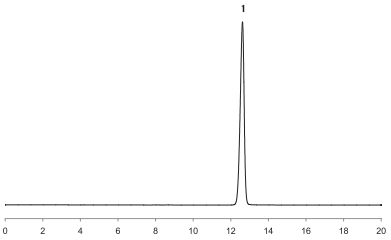
Sun screen & S1



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : ACN / MeOH / Water = 60 / 20 / 20
Flow rate : 1.0 ml/min
Detection : UV 325nm
Temperature : 35 °C
Injection Volume : 10μL
Sample : 1. IMC 2. DHHB 3. S_1 4. S_1 5. OMC 6. OS

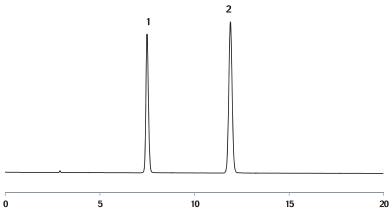
7-3. Pharmaceuticals

Aciclovir(Acyclovir)



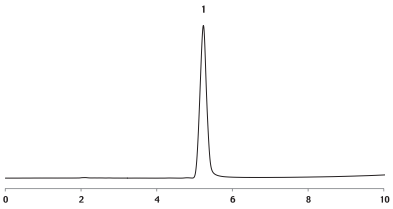
Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.01M KH_2PO_4 aq. (0.1 % 1-Decansulfonic acid, pH 3.0) / ACN = 96 / 4
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 20 °C
Injection Volume : 10μL
Sample : 1. Aciclovir(Acyclovir)

Aripiprazole



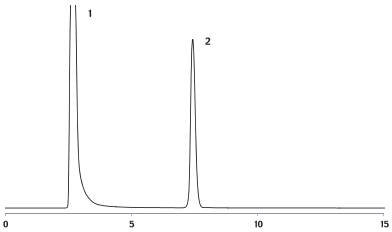
Column : Hector-M C8 5μm
Dimension : 250 X 4.6mm
Mobile phase : 20 mM Na_2SO_4 / ACN / MeOH / Acetic aicd = 560 / 330 / 110 / 1
Flow rate : 1.2 ml/min
Detection : UV 254nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Aripiprazole 2. Propyl Paraben

Allantoin



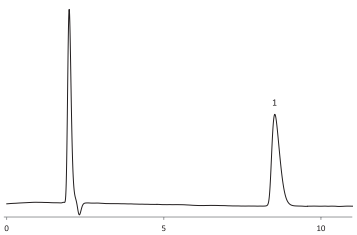
Column : Hector-M NH2 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. / ACN = 30 / 70
Flow rate : 1.2 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Allantoin

Allylisopropylacetylurea



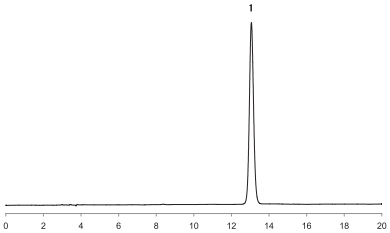
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : MeOH / Water / Acetic acid / Triethylamine = 600 / 400 / 1 / 1
Flow rate : 1.0 ml/min Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample solvent : DMSO / Mobile phase = 1 / 2
Sample : 1. DMSO 2. Allylisopropylacetylurea

Topiramate



Column : Optimapak C18 5μm
Dimension : 250 X 4.6 mm
Mobile Phase : 0.02 M Ammonium acetate aq. (pH 4.0) / Methanol = 60 / 40
Flow rate : 1.5 mL/min
Detection : RID
Temperature : 40 °C
Injection Volume : 20μL
Sample : 1. Topiramate

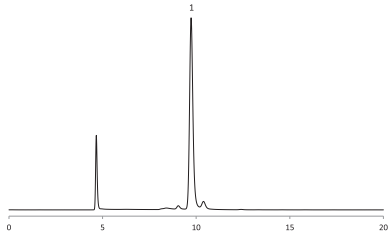
Fluconazole



Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.01 M KH_2PO_4 aq. (0.1 % 1-Decansulfonic acid, pH 3.0) / MeOH = 70 / 30
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Fluconazole

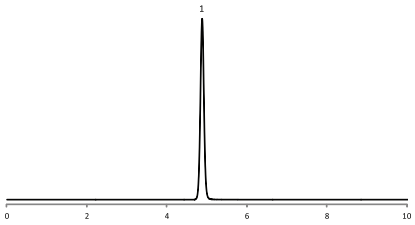
7-3. Pharmaceuticals

Naftifine HCl



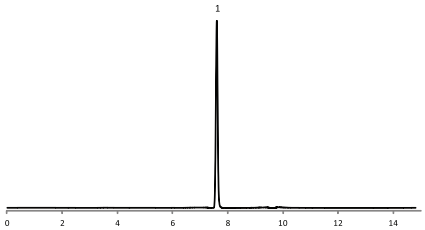
Column : Optimapak Sil 5 μm
Dimension : 250 X 4.6mm
Mobile phase : Hexane / Ethanol = 2 / 1 (0.5 % $HClO_4$)
Flow rate : 0.8 ml/min
Detection : UV 282nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Naftifine HCl

Acetaminophen



Column : Hector-M C18 5μm
Dimension : 250 X 4.6 mm
Mobile Phase : Water / Methanol = 3 / 1
Flow rate : 1.0 mL/min
Detection : UV 243 nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Acetaminophen

Acetaminophen



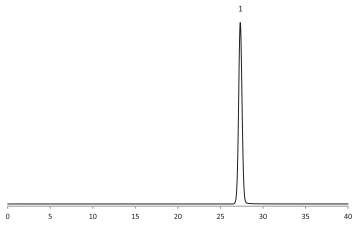
Column : Hector-M C8 3μm Dimension : 150 X 4.6 mm
Mobile Phase : A: 1.7 g/L of KH_2PO_4 and 1.8 g/L of Na_2HPO_4
B: Methanol

Gradient :

Time	0.0	3.0	7.0	7.1	10.0
% B	1	1	81	1	1

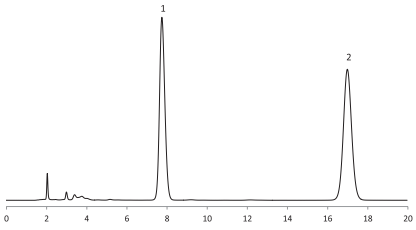
Flow rate : 1.0 mL/min Detection : UV 230 nm
Temperature : 35 °C Injection Volume : 5μL
Sample : 1. Acetaminophen

Acetanilide



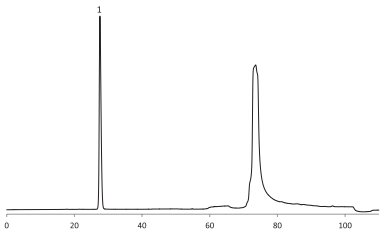
Column : Optimapak C8 5μm
Dimension : 250 X 4.6 mm
Mobile Phase : A) MeOH / Water / Acetic acid = 50 / 850 / 1
B) MeOH / Water / Acetic acid = 500 / 500 / 1
A / B = 82 / 1 8
Flow rate : 0.9 mL/min
Detection : UV 254 nm
Temperature : 40 °C
Injection Volume : 1 0 μL
Sample : 1. Acetanilide

Cefpiramide Sodium for Injection



Column : Hector-M C18 10μm
Dimension : 300 X 3.9 mm
Mobile Phase : 0.01 mol/L Phosphate buffer (pH 6.8) / MeOH / ACN / THF = 880 / 40 / 40 / 40
Flow rate : 1.2 mL/min
Detection : UV 254 nm
Temperature : 45 °C
Injection Volume : 5 μL
Sample : 1. Cefpiramide 2. Aminopyrine

Atorvastatin Calcium



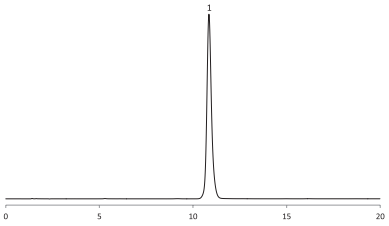
Column : Optimapak C8 5 μm
Dimension : 250 X 4.6 mm
Mobile Phase : Buffer: 3.9 g/L of ammonium acetate in water(pH 5.1 with acetic acid)
Solution A: ACN / THF / Buffer = 23 / 12 / 65
Solution B: ACN / THF / Buffer = 61 / 12 / 27

Time	0	40	70	85	100	105	115
% B	0	0	80	100	100	0	0

Flow rate : 1.5 mL/min Detection : UV 244 nm
Temperature : 35 °C Injection Volume : 20μL
Sample : 1. Atorvastatin Calcium

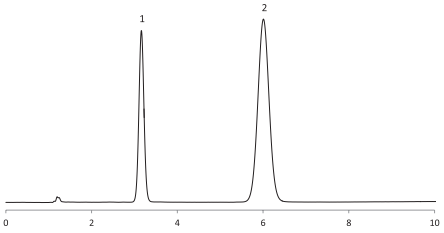
7-3. Pharmaceuticals

Atorvastatin



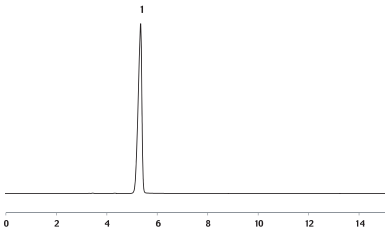
Column : Optimapak C18 5μm
Dimension : 250 X 4.6 mm
Mobile Phase : buffer) 10.5g of Citric acid monohydrate in 1 L of water (pH 4.0)
buffer / ACN / THF = 530 / 270 / 200
Flow rate : 1.4 mL/min
Detection : UV 254 nm
Temperature : 40 °C
Injection Volume : 10 mL
Sample : 1. Atorvastatin

Amoxicillin · Clavulanate Potassium



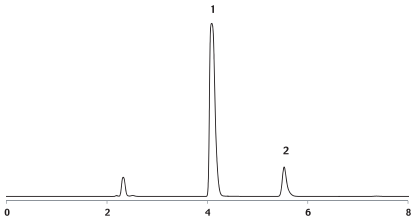
Column : HECTOR-M C18 10μm
Dimension : 300 X 3.9 mm
Mobile Phase : Phosphate buffer (pH 4.4) / MeOH = 95 / 5
Flow rate : 2.0 mL/min
Detection : UV 220 nm
Temperature : 25 °C
Injection Volume : 10 mL
Sample : 1. Clavulanate Potassium
2. Amoxicillin

Fluconazole



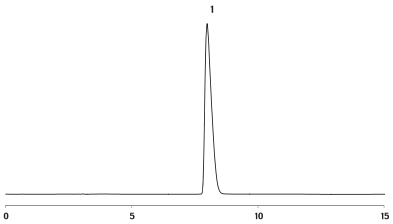
Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% Ammonium acetate aq. / MeOH / ACN = 70 / 20 / 10
Flow rate : 1.0 ml/min
Detection : UV 322nm
Temperature : 35 °C
Injection Volume : 10μL
Sample : 1. Fluconazole

Benzenesulfonic acid & Butylhydroquinone



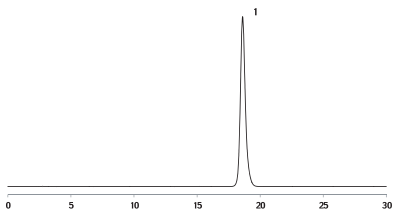
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 25mM Ammonium acetate aq. / ACN = 30 / 70
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Benzenesulfonic acid 2. Butylhydroquinone

Bortezomib



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. (pH2.0) / MeOH = 50 / 50
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Bortezomib

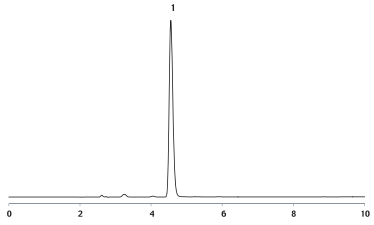
Buprenorphine HCl



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 1.0 % Ammonium acetate aq. / MeOH / Acetic acid = 10 / 60 / 0.1
Flow rate : 1.0 ml/min
Detection : UV 280nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Buprenorphine HCl

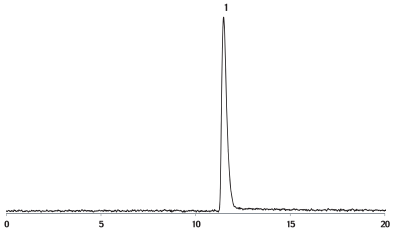
7-3. Pharmaceuticals

CarbiDOPA



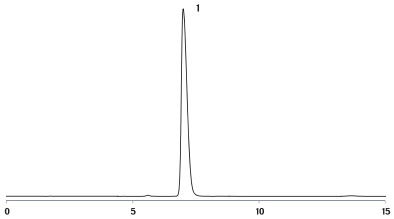
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. (pH2.0) / ACN = 70 / 30
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 20 °C
Injection Volume : 10μL
Sample : 1. CarbiDOPA

Carvedilol



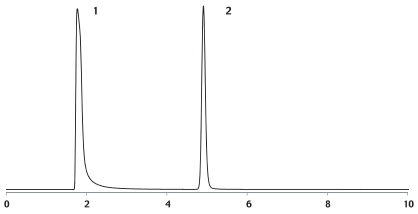
Column : Hector-M C8 5μm
Dimension : 250 X 4.6mm
Mobile phase : 20 mM KH_2PO_4 aq. (pH2.0) / ACN = 690 / 310
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 55 °C
Injection Volume : 10μL
Sample : 1. Carvedilol

Chlordiazepoxide HCl



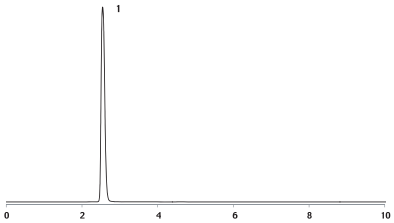
Column : Hector-M C18 5μm
Dimension : 100 X 8.0mm
Mobile phase : Buffer / THF / MeOH = 70 / 24 / 6
(10mM Octansulfonic acid aq.)
Flow rate : 2.0 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Chlordiazepoxide HCl

Cilindipine



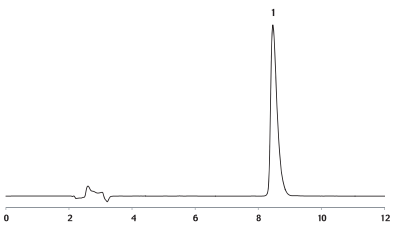
Column : Hector-M C18 5μm
Dimension : 250 X 3.9mm
Mobile phase : Water / ACN = 20 / 80
Flow rate : 1.0 ml/min
Detection : UV 230nm
Temperature : 40 °C
Injection Volume : 10μL
Sample solvent : DMSO / Mobile phase = 1/ 2
Sample : 1. DMSO 2. Cilindipine

Citicoline



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 10mM Tetrabutylammonium hydrogen sulfate aq. / MeOH = 95 / 5
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Citicoline

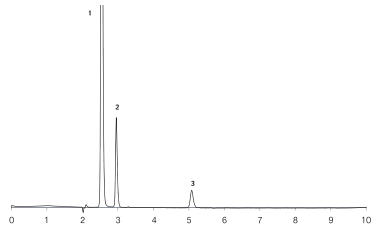
Dexamethansone Phosphate disodium



Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : H_3PO_4 aq. (pH2.3) / ACN = 70 / 30
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 40 °C
Injection Volume : 20μL
Sample : 1. Dexamethansone Phosphate disodium

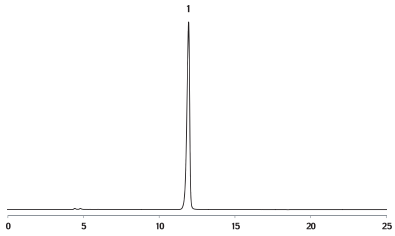
7-3. Pharmaceuticals

Dexibuprofen



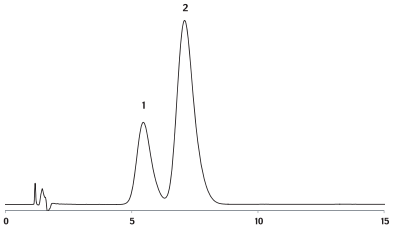
Column : Hector-M M18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1 % H_3PO_4 / ACN = 70 / 30
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 25 °C
Injection Volume : 5μL
Sample : 1. Dexibuprofen 2. Phenol 3. Caffeine

Doripenem



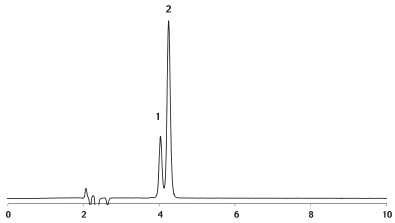
Column : Hector-A C18 3μm
Dimension : 150 X 4.6mm
Mobile phase : 0.1% Triethylamine (pH 5.8) / ACN = 95 / 5
Flow rate : 0.5 ml/min
Detection : UV 215nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Doripenem

Ephedrine



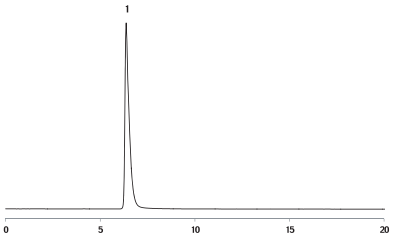
Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : Buffer / MeOH / H_3PO_4 = 640 / 340 / 1
(Buffer : 5g Sodium lauryl sulfate)
Flow rate : 1.5 ml/min
Detection : UV 210nm
Temperature : 45 °C
Injection Volume : 10μL
Sample : 1. Ephedrine 2. Atropine

Ephedrine



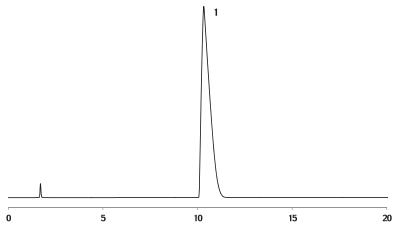
Column : Hector-M PN 5μm
Dimension : 250 X 4.6mm
Mobile phase : Buffer / MeOH = 350 / 650
(Buffer : 6.8g Sodium acetate + 16.22g Sodium octane sulfonate with Acetic acid pH 4.6)
Flow rate : 1.2 ml/min
Detection : UV 215nm
Temperature : 35 °C
Injection Volume : 10μL
Sample : 1. Ephedrine 2. Atropine

Fenofibrate



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : H_3PO_4 (pH2.5) aq. / ACN = 30 / 70
Flow rate : 1.0 ml/min
Detection : UV 285nm
Temperature : 35 °C
Injection Volume : 10μL
Sample : 1. Fenofibrate

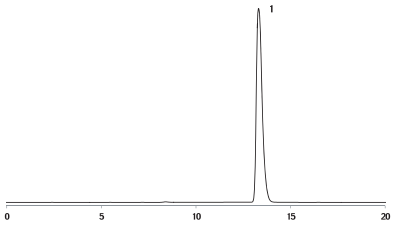
Fentanyl citrate



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. / ACN = 65 / 35
Flow rate : 1.5 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Fentanyl citrate

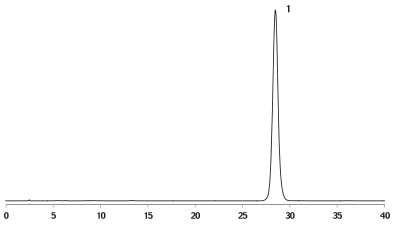
7-3. Pharmaceuticals

Fludiazepam



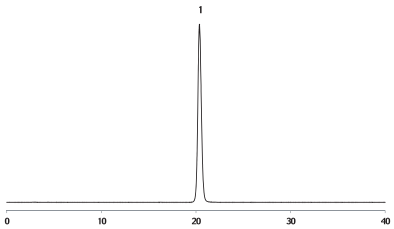
Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : Water / ACN / Acetic aicd = 60 / 40 / 0.4
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Fludiazepam

Gefitinib



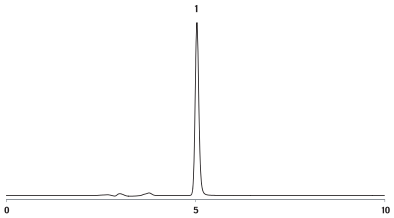
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 10 mM KH_2PO_4 / ACN = 35 / 65
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Gefitinib

Gemcitabine HCl



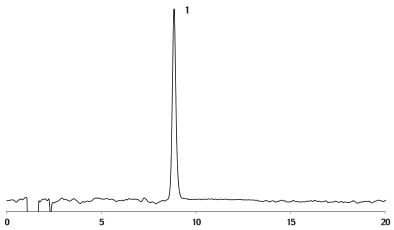
Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 10mM NaH_2PO_4 aq. (pH2.4)
Flow rate : 1.0 ml/min
Detection : UV 275nm
Temperature : 35 °C
Injection Volume : 10μL
Sample : 1. Gemcitabine HCl

Linezolide



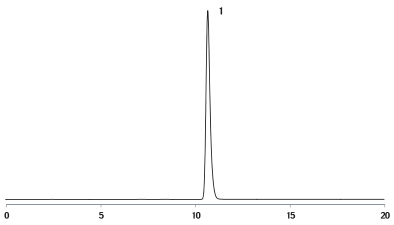
Column : Hector-T C18 5μm
Dimension : 150 X 4.6mm
Mobile phase : 0.1 % TFA aq. / 0.1 % TFA in ACN = 66 / 34
Flow rate : 0.5 ml/min
Detection : UV 254nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Linezolide

Lithocholic acid



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 10mM Ammonium acetate aq. / ACN / Acetic acid = 30 / 70 / 1
Flow rate : 1.5 ml/min
Detection : RID
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Lithocholic acid

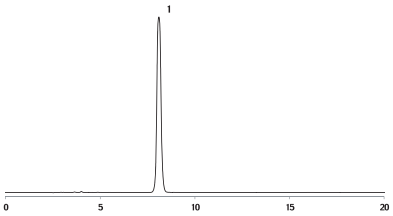
Lometazepam



Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : Water / ACN / Acetic aicd = 60 / 40 / 0.4
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Lometazepam

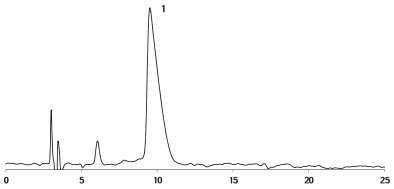
7-3. Pharmaceuticals

Loxoprofen



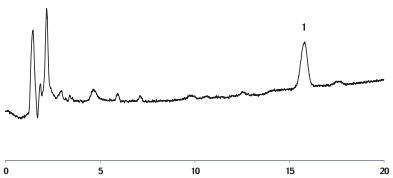
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : MeOH / Water / Acetic acid / Triethylamine
= 600 / 400 / 1 / 1
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Loxoprofen

Lysozyme chloride



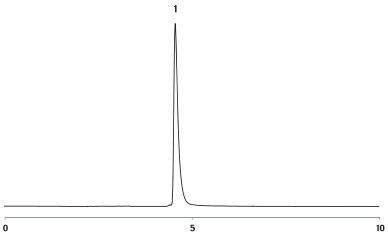
Column : Hector-W C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : Water / ACN / TFA = 638 / 630 / 2
Flow rate : 1.0 ml/min
Detection : RID
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Lysozyme chloride

Misoprostol



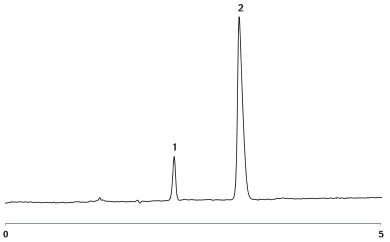
Column : Hector-M C18 3μm
Dimension : 150 X 4.6mm
Mobile phase : Water / ACN = 52 / 48
Flow rate : 0.2 ml/min
Detection : UV 210nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Misoprostol

Ofloxacin



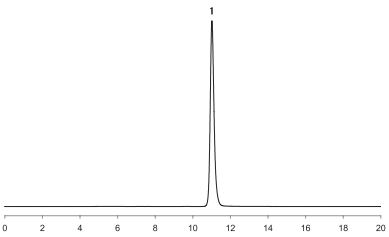
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : A : 20 mM KH_2PO_4 & K_2HPO_4
B : Acetonitrile
A / B = 50 / 50
Flow rate : 1.0ml/min
Detection : UV 240nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Ofloxacin

Phenternmine



Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.03 % Diethylamine in MeOH
Flow rate : 1.5 ml/min
Detection : UV 254nm
Temperature : 25 °C
Injection Volume : 5μL
Sample : 1. Caffein 2. Phentermine

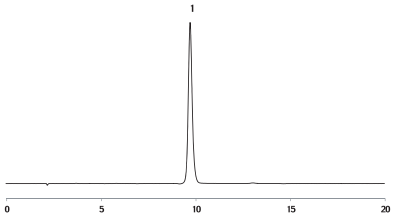
Pirfenidone



Column : Hector-M PN 5μm
Dimension : 250 X 4.6mm
Mobile phase : 13.8g NaH_2PO_4 + 2.5mL H_3PO_4 / 1 L aq. (pH2.4) /
MeOH = 50 / 50
Flow rate : 1.0 ml/min
Detection : UV 317nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Pirfenidone

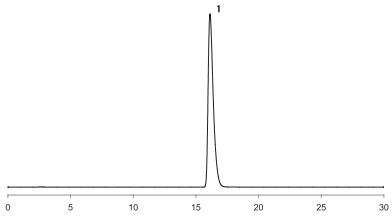
7-3. Pharmaceuticals

Proxicam



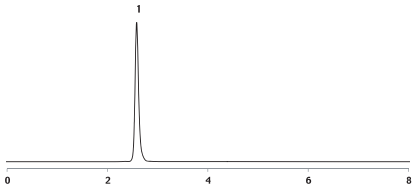
Column : Hector-M PN 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% H_3PO_4 / ACN = 40 / 60
Flow rate : 1.0 ml/min
Detection : UV 360nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Proxicam

Propiverine



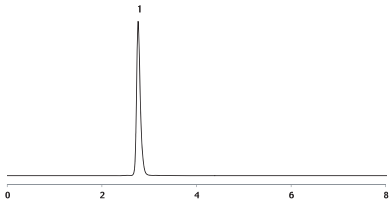
Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. / MeOH = 30 / 70
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Propiverine

Rantidine HCl



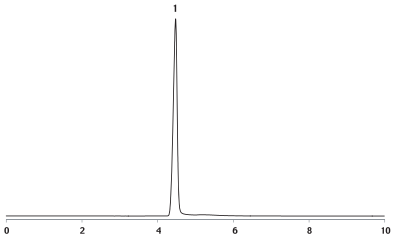
Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1M Ammonium acetate aq. / MeOH = 15 / 85
Flow rate : 1.0 ml/min
Detection : UV 322nm
Temperature : 35 °C
Injection Volume : 10μL
Sample : 1. Rantidine HCl

Rantidine HCl



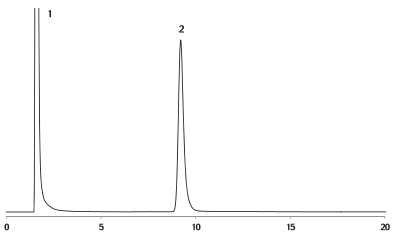
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1 M Ammonium acetate aq. / MeOH = 15 / 85
Flow rate : 1.0 ml/min
Detection : UV 322nm
Temperature : 35 °C
Injection Volume : 10μL
Sample : 1. Rantidine HCl

Rasagiline



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 2g KH_2PO_4 + TEA (pH3.0) / ACN = 20 / 80
Flow rate : 0.5 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Rasagiline

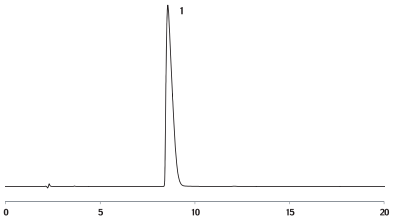
Rebamipid



Column : Hector-M C18 5μm
Dimension : 150 X 4.6mm
Mobile phase : Buffer / MeOH / H_3PO_4 = 50 / 50 / 0.5
(10mM Octansulfonic acid aq.)
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. DMSO(sample solvent) 2. Rebamipide

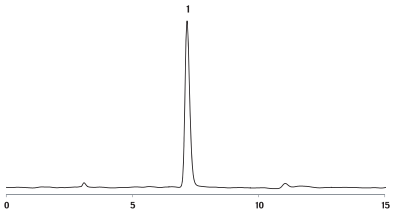
7-3. Pharmaceuticals

Solifenacin succinate



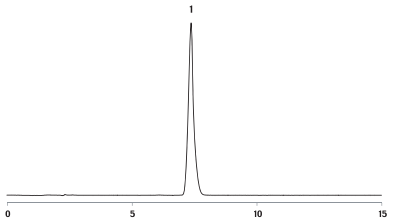
Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : Water / ACN / TEA / TFA
= 600 / 400 / 0.6 / 0.6
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Solifenacin succinate

Thioctic acid



Column : Hector-M PN 5μm
Dimension : 260 X 4.6mm
Mobile phase : 25mM Ammonium acetate aq. / MeOH
= 30 / 70
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 35 °C
Injection Volume : 10μL
Sample : 1. Thioctic acid

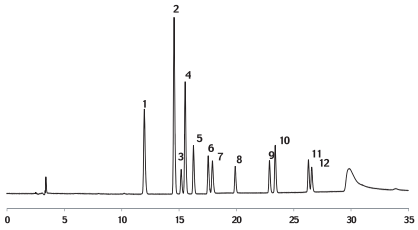
Triclosan



Column : Hector-M C18
Dimension : 250 X 4.6mm
Mobile phase : Water / ACN = 20 / 80
Flow rate : 1.0 ml/min
Detection : UV 280nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Triclosan

7-4. Foods

Antiseptic



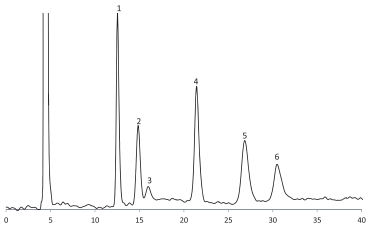
Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : A: 0.1% H_3PO_4 aq. B: ACN
Gradient :

Time	0	8	15	25	30
% B	15	25	40	60	65

Flow rate : 1.0 ml/min
Detection : UV 220nm
Temperature : 25 °C
Injection Volume : 5μL

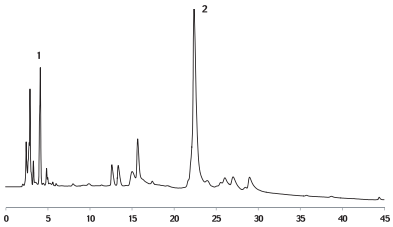
Sample : 1. Benzyl alcohol
2. Phenoxy ethanol
3. Sorbic acid
4. Benzoic acid
5. Methyl paraben
6. Salicylic acid
7. Dehydroacetic acid
8. Ethyl paraben
9. Iso-Propyl paraben
10. Propyl paraben
11. Iso-Butyl paraben
12. Butyl paraben

Monosaccharides



Column: Hector-M NH2 5μm
Dimension : 250 X 4.6mm
Mobile phase : 75 % ACN
Flow rate : 0.8 ml/min
Detection : RID
Temperature : 25 °C
Injection Volume : 20μL
Sample : 1. Fructose 2. Glucose 3. Glactose 4. Sucrose
5. Maltose 6. Lactose

Beehoney



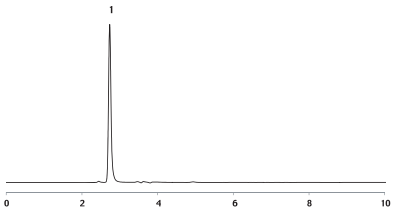
Column : Hector-M C18 5μm Dimension : 250 X 4.6mm
Mobile phase : A: 0.1% TFA aq. B: ACN

Time	0	5	40	45
% B	20	20	80	80

Flow rate : 1.0 ml/min
Detection : UV 220nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Apamine 2. Melittin

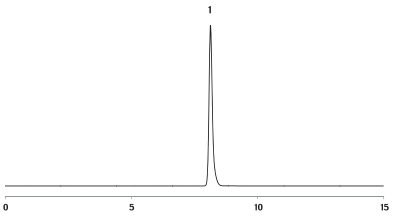
7-4. Foods

Betaine



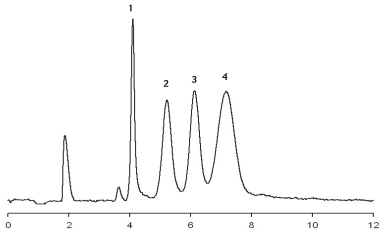
Column : Hector-M C18 5μm
Dimension : 150 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. / ACN = 70 / 30
Flow rate : 0.5 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Betaine

Bisphenol A



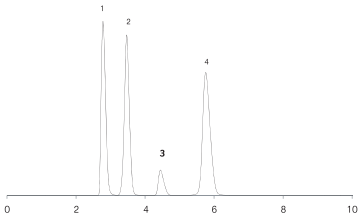
Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : Water / ACN = 50 / 50
Flow rate : 1.0 ml/min
Detection : UV 270nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Bisphenol A

Carbohydrates



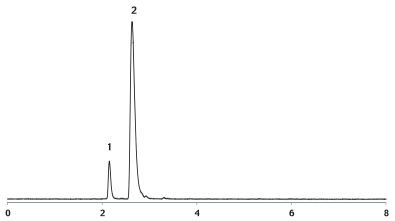
Column : Hector-M NH2 5μm
Dimension : 150 X 4.6mm
Mobile phase : Water / ACN / MeOH = 20 / 70 / 10
Flow rate : 1.0 ml/min
Detection : ELSD, tubing temp. 90 °C, gas flow rate 2ml/min
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Ribose 2. Arabinose 3. Mannose 4. Galactose

Food Preservation



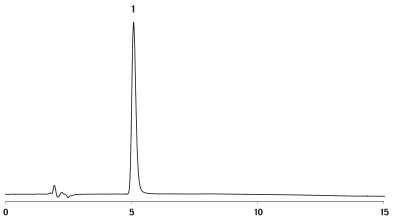
Column : Hector-A C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : MeOH / 20mM Ammonium acetate aq. = 50 / 50
Flow rate : 1.0 ml/min
Detection : UV 230nm
Temperature : 25 °C
Injection Volume : 5μL
Sample : 1. Benzoic acid 2. 4-Chloro benzoic acid
3. Caffein 4. Benzaldehyde

L-Carnitine



Column : Hector-M C18 5μm
Dimension : 150 X 4.6mm
Mobile phase : 25mM Ammonium acetate aq. / ACN
= 70 / 30
Flow rate : 0.8 ml/min
Detection : ELSD (80 °C, N_2 2.0ml/min)
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Unknown 2. L-carnitine

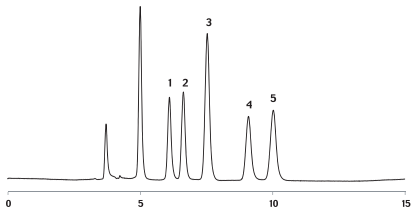
Maltitol



Column : Hector-M NH2 5μm
Dimension : 250 X 4.6mm
Mobile phase : Water / ACN = 40 / 60
Flow rate : 1.5 ml/min
Detection : RID
Temperature : 35 °C
Injection Volume : 10μL
Sample : 1. Maltitol

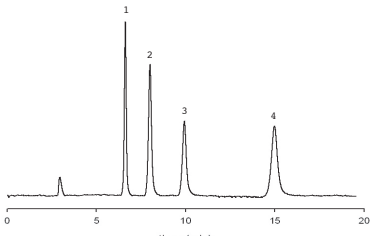
7-4. Foods

Organic acid



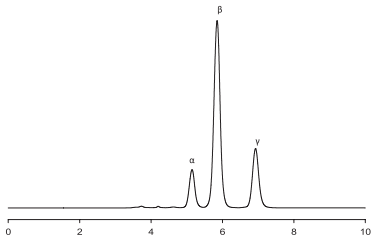
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 20 mM KH_2PO_4 & K_2HPO_4 aq. / MeOH = 90 / 10
Flow rate : 0.7ml/min
Detection : UV 210nm
Temperature : 25 °C
Injection Volume : 5μL
Sample : 1. Lactic acid 2. Acetic acid 3. Citric acid
4. Succinc acid 5. Malic acid

Sugar alcohols



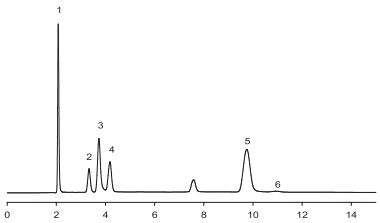
Column : Hector-M NH2 5μm
Dimension : 250 X 4.6mm
Mobile phase : Water / ACN = 30 / 70
Flow rate : 1.0 ml/min
Detection : ELSD, tubing temp. 90 °C, gas flow rate 2ml/min
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. iso-erythitol 2. D(+)-arabitol
3. galacitol 4. Matitol

DL-Tocopherol mixture, natural (α, β, γ)



Column : Hector-M Sil 5μm
Dimension : 150 X 4.6mm
Mobile phase : Hexane / IPA = 98 / 2
Flow rate : 0.5 ml/min
Detection : UV 295nm
Temperature : 25 °C
Injection Volume : 10μL

Vitamin



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : A: 20 mM KH_2PO_4 (pH 2.5) B: MeOH

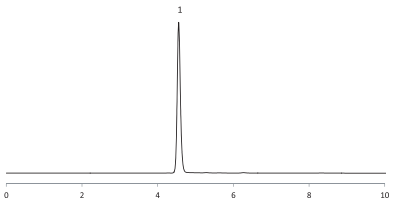
Time	1	3	5
% B	5	6	12

Flow rate : 1.0 ml/min
Detection : UV 220nm
Temperature : 25 °C
Injection Volume : 5μL

Sample : 1. Thiamine Hydrochloride
2. Pyridoxal Hydrochloride
3. Niacinamide
4. Pyridoxine Hydrochloride
5. p-Aminobenzoic acid
6. d-Pantothenic acid

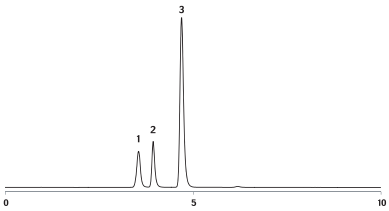
7-5. Others

3-hydroxy benzoic acid



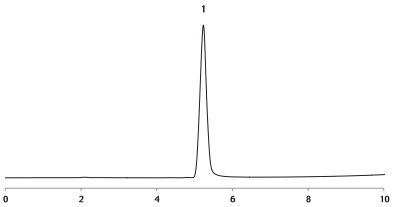
Column : Hector M PN 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1 % H_3PO_4 aq. / ACN = 60 / 40
Flow rate : 0.7 ml/min
Detection : UV 225nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. 3-hydroxy benzoic acid

Aniline 외 2종



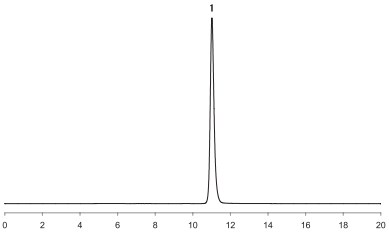
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. / ACN = 60 / 40
Flow rate : 1.0 ml/min
Detection : UV 230nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. 1-phenyl-1H pyrrole-2,5 dione 2. Aniline
3. 4-oxo-4-(Phenylamino) but-2-enoic acid

Allantoin



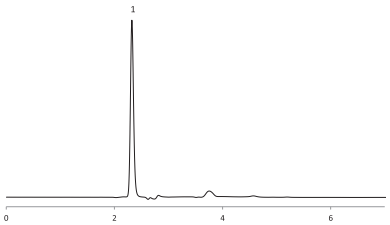
Column : Hector-M NH2 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. / ACN = 30 / 70
Flow rate : 1.2 ml/min
Detection : UV 210nm
Temperature : 4 °C
Injection Volume : 10μL
Sample : 1. Allantoin

Pirfenidone



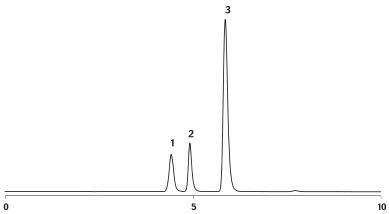
Column : Hector-M PN 5μm
Dimension : 250 X 4.6mm
Mobile phase : 13.8g Monobasic sodium phosphate + 2.5mL
H_3PO_4 / 1 L aq. (pH2.4) / MeOH = 50 / 50
Flow rate : 1.0 ml/min
Detection : UV 317nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Pirfenidone

D-Glucuronic acid



Column : Hector-A C18 5μm
Dimension : 250 X 4.6 mm
Mobile Phase : 20 mM KH_2PO_4 / ACN = 80 / 20
Flow rate : 1.0 mL/min
Detection : UV 210 nm
Temperature : 35 °C
Injection Volume : 10μL
Sample : 1. D-Glucuronic acid

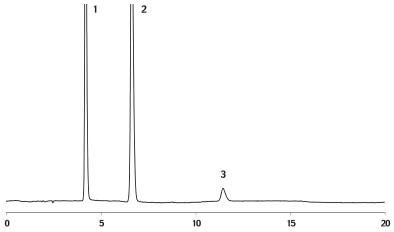
Aniline 외 2종



Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1 % H_3PO_4 aq. / ACN = 60 / 40
Flow rate : 1.0 ml/min
Detection : UV 230nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. 1-phenyl-1H pyrrole-2,5 dione 2. Aniline
3. 4-oxo-4-(Phenylamino) but-2-enoic acid

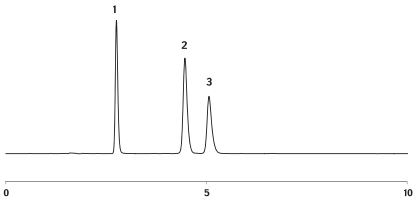
7-5. Others

Formaldehyde



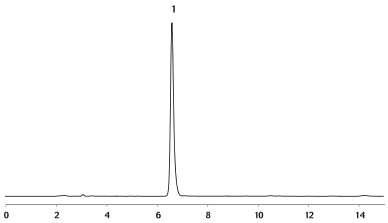
Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : Water / ACN = 40 / 60
Flow rate : 1.0 ml/min
Detection : UV 354nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. unknown 2. Formaldehyd 3. Acetone

Azoxystrobine & Fenhexamide



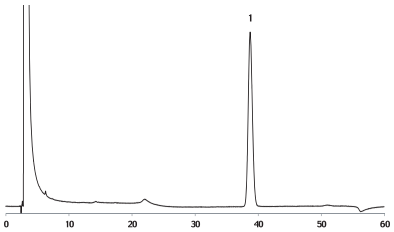
Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : Water / ACN = 25 / 75
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Unknown 2. Azoxystrobine 3. Fenhexamide

Baicalin



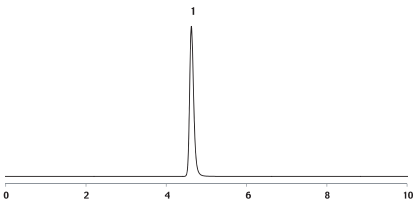
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : H_3PO_4 aq. (1→145) / ACN = 720 / 280
Flow rate : 1.0 ml/min
Detection : UV 277nm
Temperature : 50 °C
Injection Volume : 10μL
Sample : 1. Baicalin

Biotine (Vitamie B7)



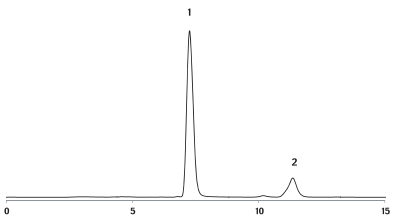
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. / ACN = 915 / 85
Flow rate : 1.0 ml/min
Detection : UV 200nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Biotine

Bisphenol A



Column : Hector-M C18 5μm
Dimension : 150 X 4.6mm
Mobile phase : Water / ACN = 50 / 50
Flow rate : 1.0 ml/min
Detection : UV 270nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Bisphenol A

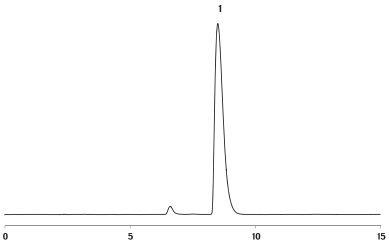
Chenodecycholic acid



Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. / ACN = 50 / 50
Flow rate : 1.0 ml/min
Detection : UV 220nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Chenodecycholic acid 2. Unknown

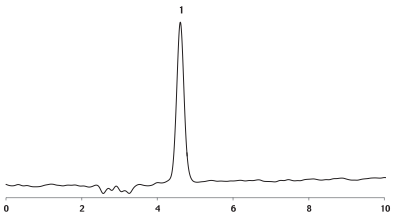
7-5. Others

Chlorobenzoic acid



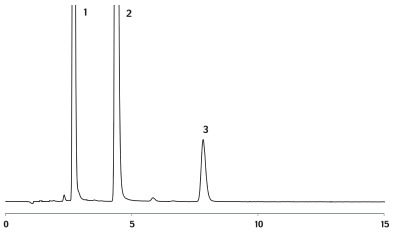
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1 % Acetic acid aq. / MeOH = 70 / 30
Flow rate : 1.0 ml/min
Detection : UV 230nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. DPG-K2

Cholic acid



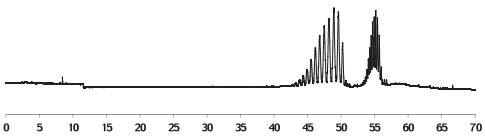
Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 10mM Ammonium acetate aq. (pH4.0) / ACN = 30 / 70
Flow rate : 1.0 ml/min
Detection : RID
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. Cholic acid

Formaldehyde



Column : Hector-M C18 5μm
Dimension : 150 X 4.6mm
Mobile phase : Water / ACN = 40 / 60
Flow rate : 1.0 ml/min
Detection : UV 354nm
Temperature : 30 °C
Injection Volume : 10μL
Sample : 1. Unknown 2. Formaldehyde 3. Acetone

LA-7

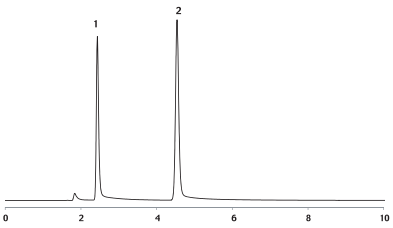


Column : Hector-M C18 5μm Dimension : 150 X 4.6mm
Mobile phase : A: Ammonium acetate B: ACN C: THF

Time	0	18	35	45	50	55	60	70
% B	45	54	60	68	70	70	45	45
% C	0	0	5	5	20	20	0	0

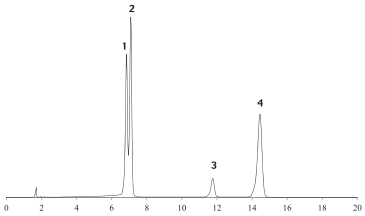
Flow rate : 0.6 ml/min
Detection : ELSD (115 °C, N_2 2.0ml/min)
Temperature : 30 °C Injection Volume : 10μL

MI & CMIT



Column : Hector-T C18 5μm
Dimension : 150 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. / ACN = 75 / 25
Flow rate : 1.0 ml/min
Detection : UV 260nm
Temperature : 30 °C
Injection Volume : 1μL
Sample : 1. Methylisothiazlinone(MI)
2. MethylChloroisothiazolinone(CMIT)

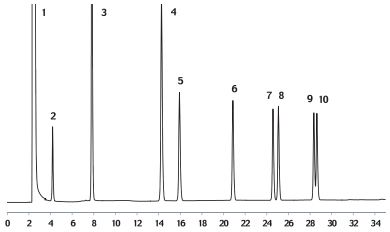
Nitrobenzaldehyde



Column : Hector-M C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : Water / ACN = 20 / 80
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 25 °C
Injection Volume : 5μL
Sample : 1. 4-nitrobenzensulfonyl chloride
2. 4-nitrobenzaldehyde 3. 3-nitrobenzaldehyde
4. 2-nitrobenzensulfonyl chloride

7-5. Others

MI & CMIT & Paraben



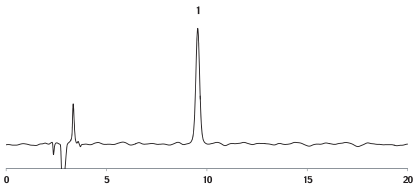
Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : A: 0.1% H_3PO_4 aq. B: ACN
Gradient :

Time	0	2	8	15	30
% B	10	20	25	35	65

Flow rate : 1.0 ml/min Detection : UV 220nm
Temperature : 35 °C
Injection Volume : 10μL

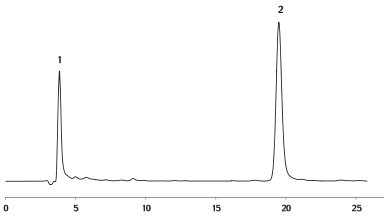
Sample : 1. Sample solvent
2. MI
3. CMIT
4. Phenoxy ethanol
5. Methyl paraben
6. Ethyl paraben
7. Iso-Propyl paraben
8. Propyl paraben
9. Iso-Butyl paraben
10. Butyl paraben

Novaluron



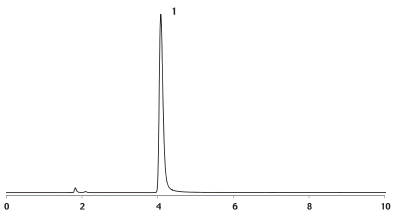
Column : Hector-M PN 5μm
Dimension : 250 X 4.6mm
Mobile phase : 0.1% H_3PO_4 aq. / ACN = 20 / 80
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Novaluron

Oleanic acid



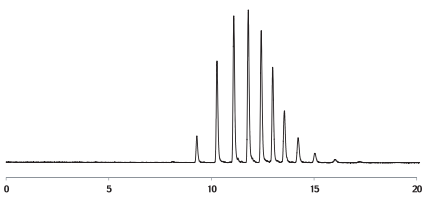
Column : Hector-M C8 5μm
Dimension : 250 X 3.0mm
Mobile phase : ACN / H_3PO_4 (pH2.3) = 75 / 25
Flow rate : 1.0 ml/min
Detection : UV 206nm
Temperature : 35 °C
Injection Volume : 10μL
Sample : 1. Unknow 2. Oleanic acid

p-Aminophenol



Column : Hector-T C18 5μm
Dimension : 250 X 4.6mm
Mobile phase : 10 mM KH_2PO_4 aq. / MeOH = 90 / 10
Flow rate : 1.0 ml/min
Detection : UV 210nm
Temperature : 40 °C
Injection Volume : 10μL
Sample : 1. p-Aminophenol

Poyl oxyethyleneglycol(PEG_400)



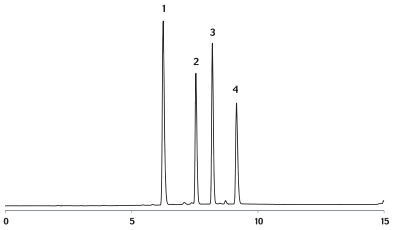
Column : Hector-M C18 5μm Dimension : 150 X 4.6mm
Mobile phase : A: Water B: ACN

Time	0	2	10	15	20
% B	5	5	20	20	5

Flow rate : 1.0 ml/min
Detection : ELSD (80 °C, N_2 1.8ml/min)
Temperature : 35 °C
Injection Volume : 10μL

7-5. Others

Pesticide

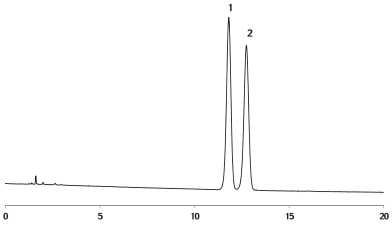


Column : Hector-T C18 5μm Dimension : 250 X 4.6mm
Mobile phase : A: 0.1 % H_2PO_4 B: ACN

Time	0	5	15
% B	60	100	100

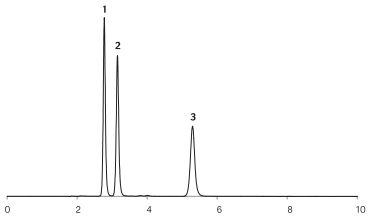
Flow rate : 0.8 ml/min Detection : UV 254nm
Temperature : 25 °C Injection Volume : 5μL
Sample : 1. Artrazine 2. Fenitrothion
3. Parathion 4. Diazinon

Pyraclostrobin & BAS 500-3



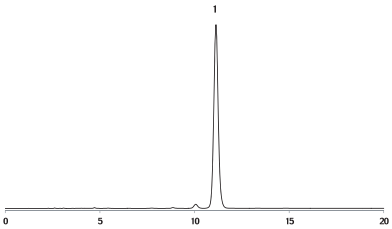
Column : Hector-M C18 5μm
Dimension : 150 X 4.6mm
Mobile phase : 0.1% Formic acid aq. / ACN = 50 / 50
Flow rate : 1.5 ml/min
Detection : UV 274nm
Temperature : 35 °C
Injection Volume : 10μL
Sample : 1. Pyraclostrobin 2. BAS 500-3

Steroid(estriol, estrone, estradiol)



Column : Hector-M Sil 5μm
Dimension : 150 X 4.6mm
Mobile phase : Hexane / Ethanol = 80 / 20
Flow rate : 1.0 ml/min
Detection : UV 230nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. Estrone 2. Estriol 3. Estradiol

1,1,1-tris(cinnamolyoxymethyl)ethane



Column : Hector-M C18 5μm
Dimension : 150 X 4.6mm
Mobile phase : Water / MeOH = 10 / 90
Flow rate : 1.0 ml/min
Detection : UV 254nm
Temperature : 25 °C
Injection Volume : 10μL
Sample : 1. 1,1,1-tris(cinnamolyoxymethyl)ethane