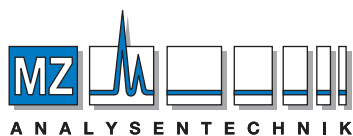


 **Imtakt**

HPLC TECHNICAL INFORMATION

Steroids



AUTHORIZED DISTRIBUTOR

MZ-Analysentechnik GmbH, Barcelona-Allee 17• D-55129 Mainz

Tel +49 6131 880 96-0, Fax +49 6131 880 96-20

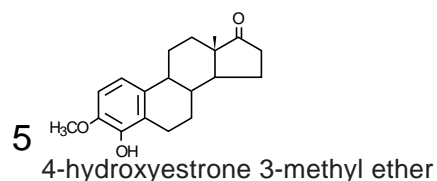
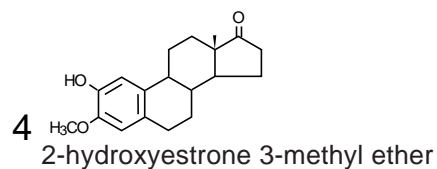
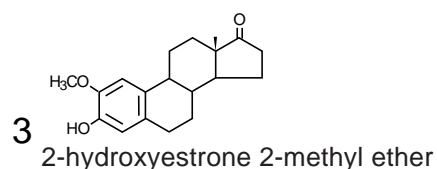
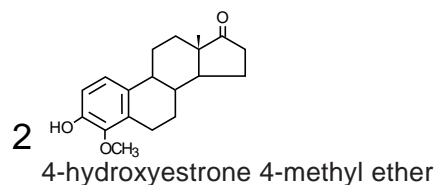
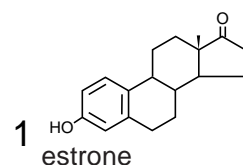
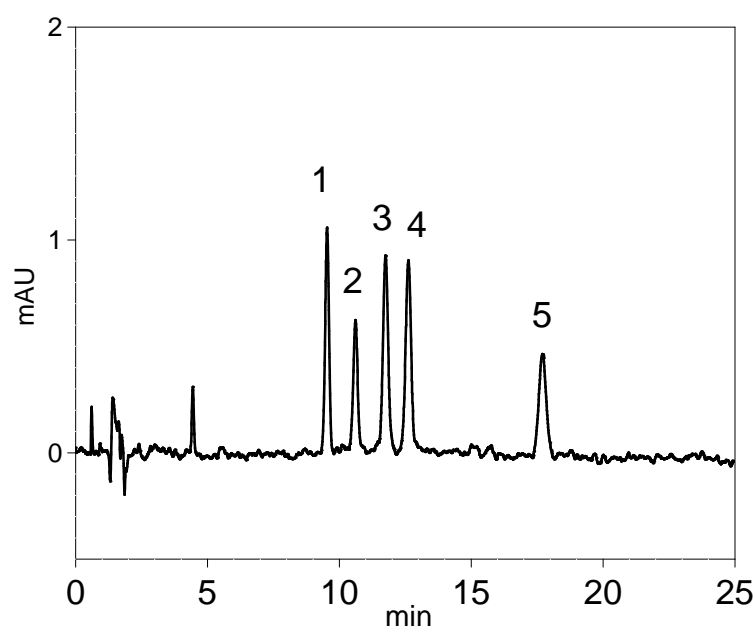
e-mail: info@mz-at.de, www.mz-at.de

Cadenza CD-C18

150 x 4.6 mm

Application

Estrogens



Cadenza CD-C18, 150 x 4.6 mm
ACN / water = 44 / 56
1.0 mL/min, 9.8 MPa, 37 °C
UV at 280 nm
5 uL inj. (50 ng)

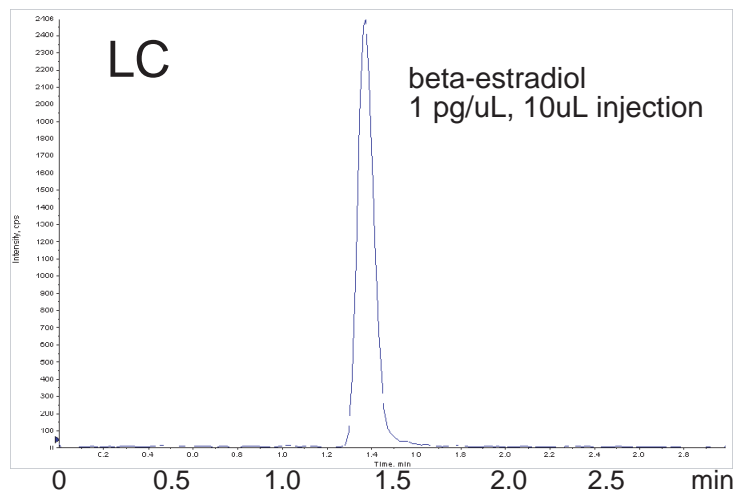
Courtesy of Prof. Dr. K. Shimada and Dr. K. Mitamura, Kanazawa Univ.

Cadenza CD-C18

50 x 2 mm

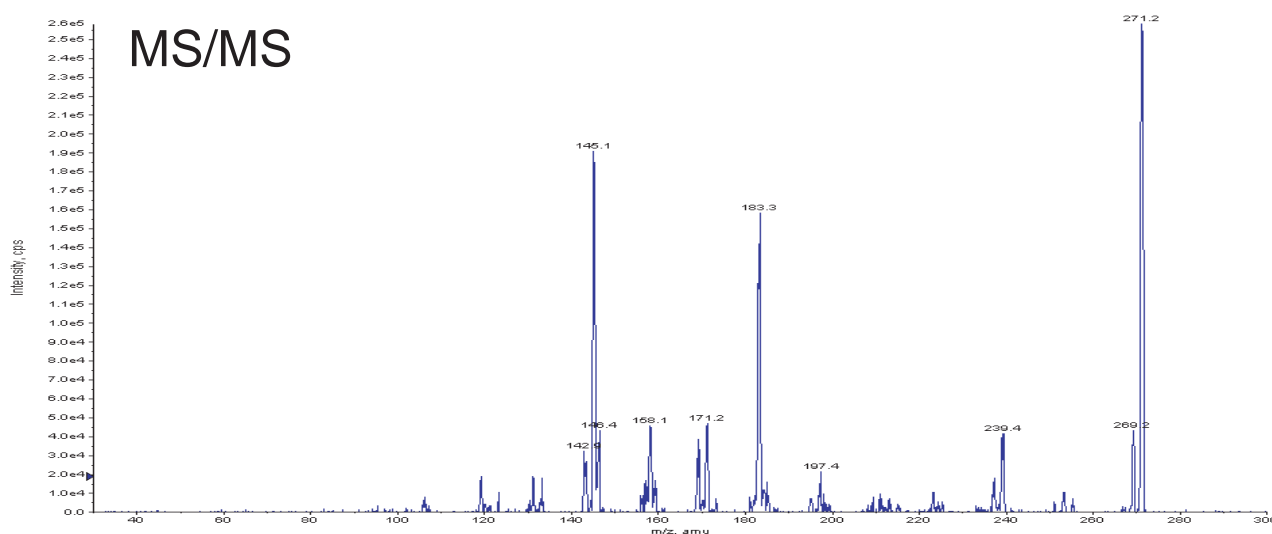
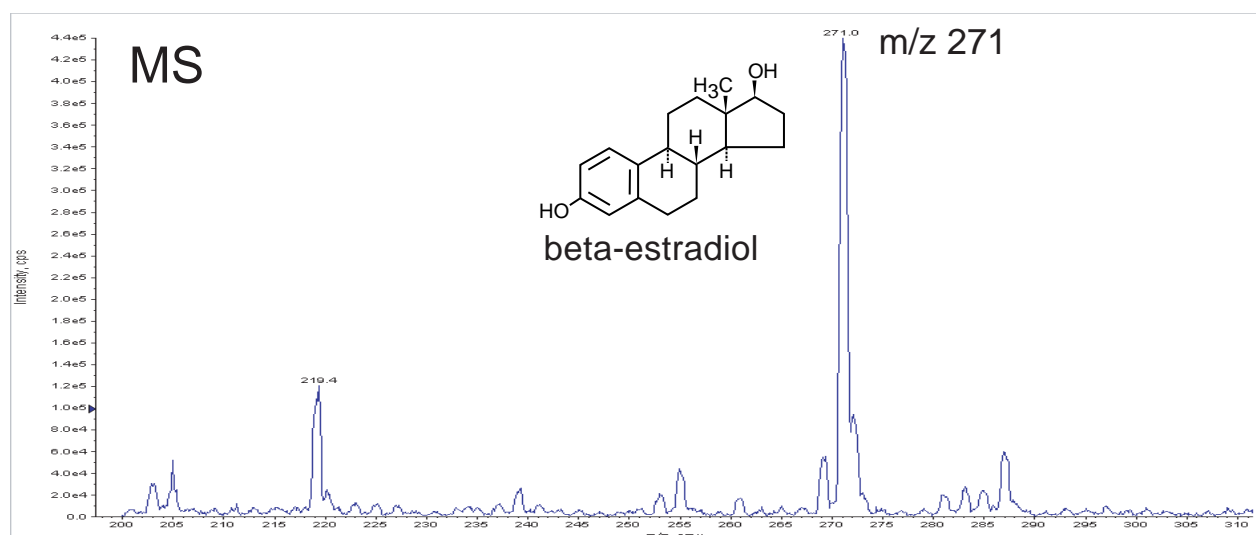
Application

LC-MS/MS High Throughput Analysis



[LC]
Cadenza CD-C18, 50 x 2 mm
methanol / water = 75 / 25
0.2 mL/min, 40 °C

[MS]
API 4000
ESI-negative



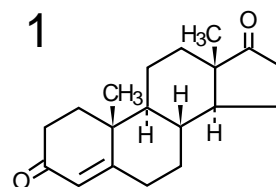
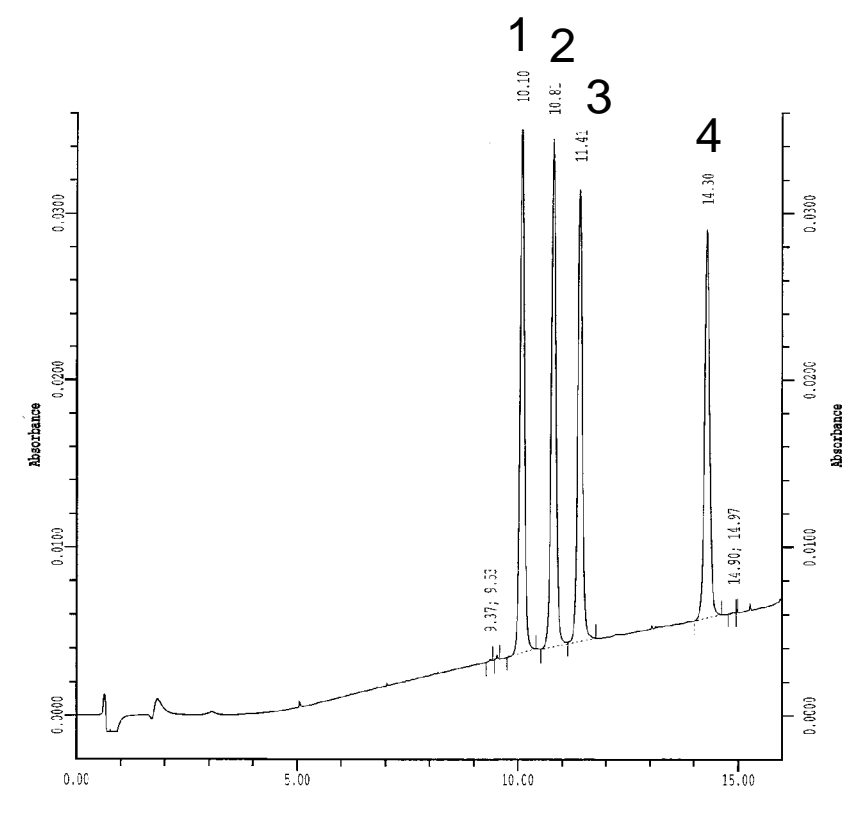
Courtesy of TAKARA SHUZO CO., LTD.

Cadenza CD-C18

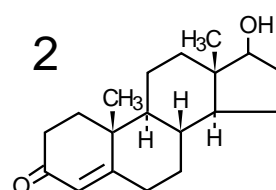
75 x 2 mm

Application

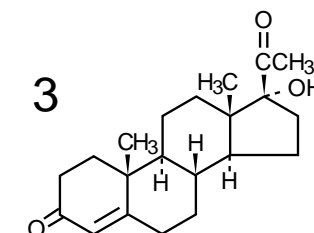
Steroid Hormones



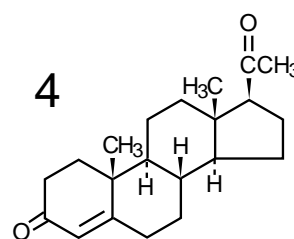
androstene-3,17-dione



testosterone



17 -hydroxyprogesterone



progesterone

Cadenza CD-C18, 75 x 2 mm

A: 10% methanol, B: methanol

30 - 50 %B (0 - 0.5 min), 50 - 80 %B (0.5 - 12.5 min), 100 %B (12.5 min -)

0.3 mL/min

UV at 260 nm

20 µL (500 ppb)

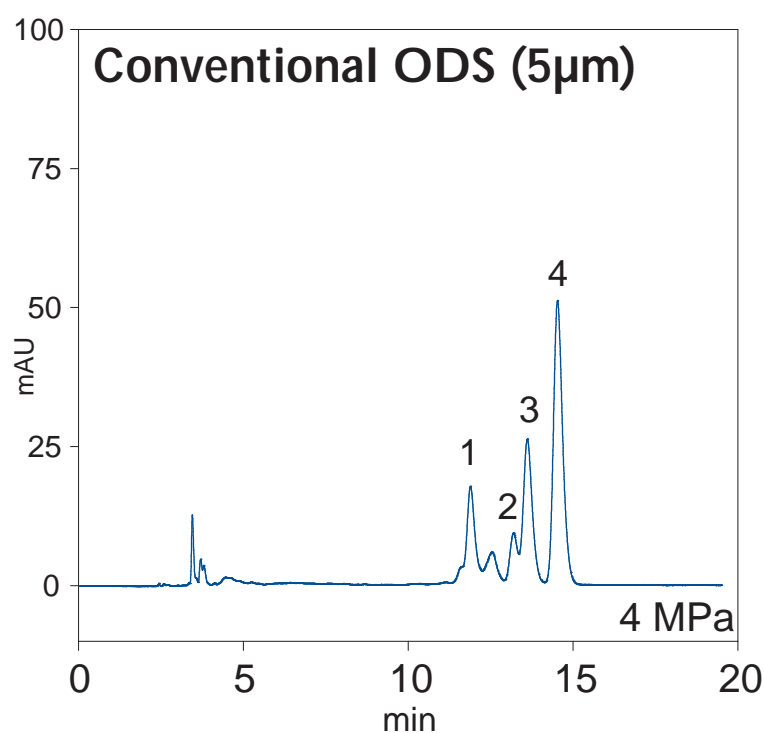
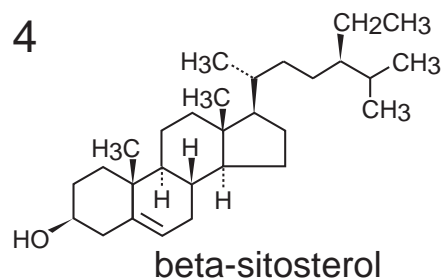
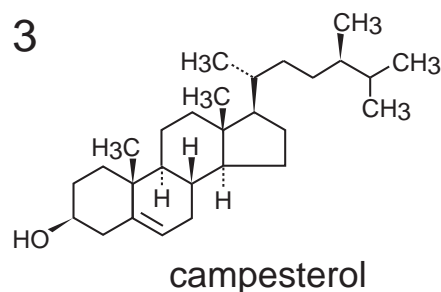
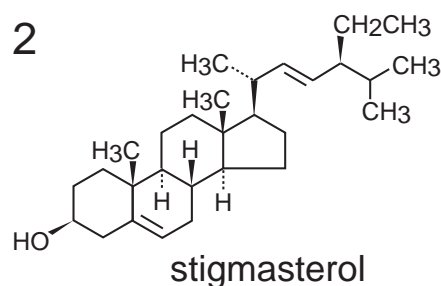
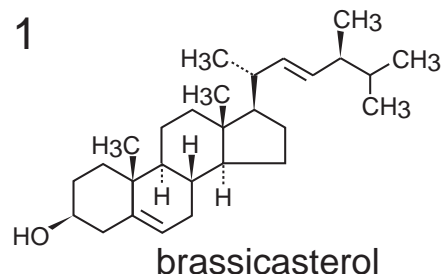
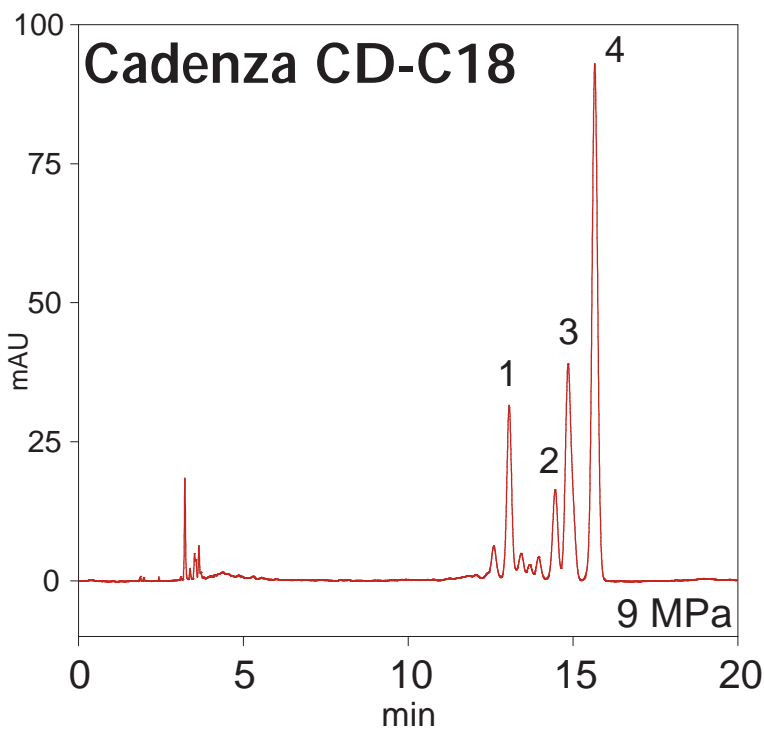
Cadenza CD-C18

250 x 4.6 mm

Application

Plant Sterols

植物ステロール



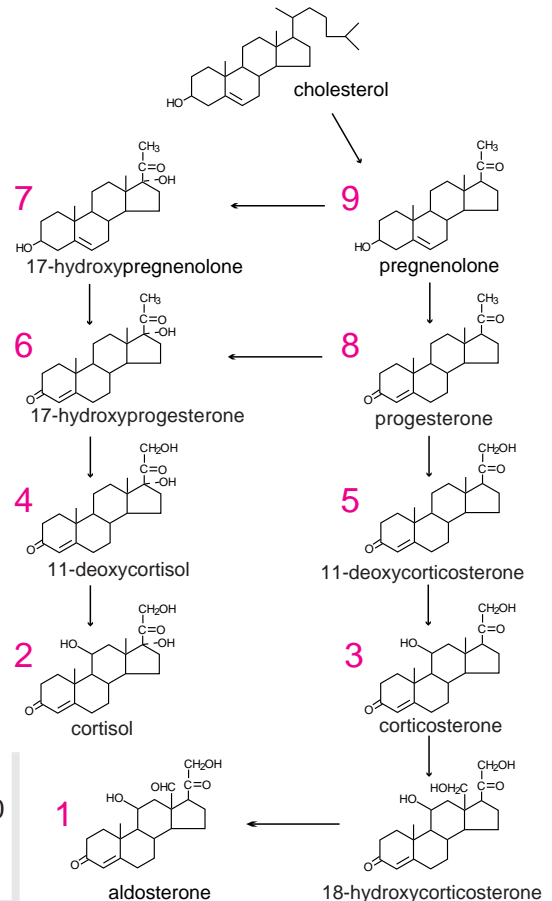
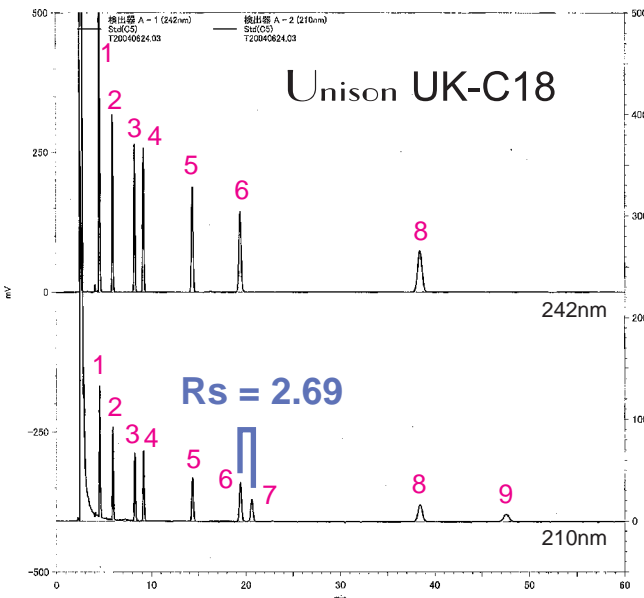
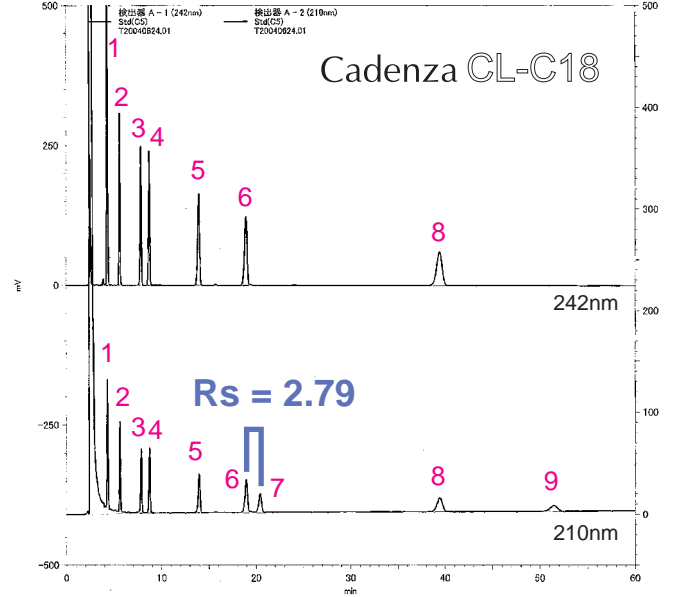
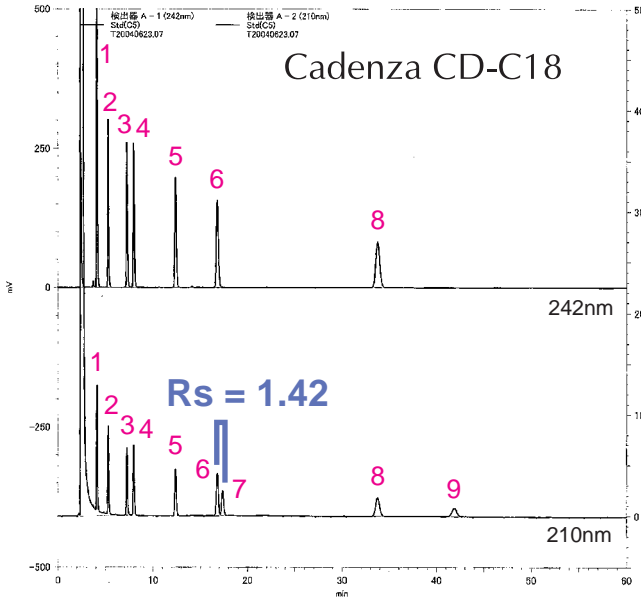
250 x 4.6 mm
 methanol / THF = 90 / 10
 0.8 mL/min, room temp.
 210 nm

Cadenza CL-C18
Cadenza CD-C18
Unison UK-C18

250 x 4.6 mm

Application

Adreno-corticosteroids
副腎皮質ホルモン



250 x 4.6 mm
10mM KH₂PO₄ / acetonitrile / tetrahydrofuran = 62 / 28 / 10
1.0 mL/min, 50 deg.C
242nm (upper) / 210nm (lower), 50uL injection

Ref.) Toxicology 165, 171-178 (2001)

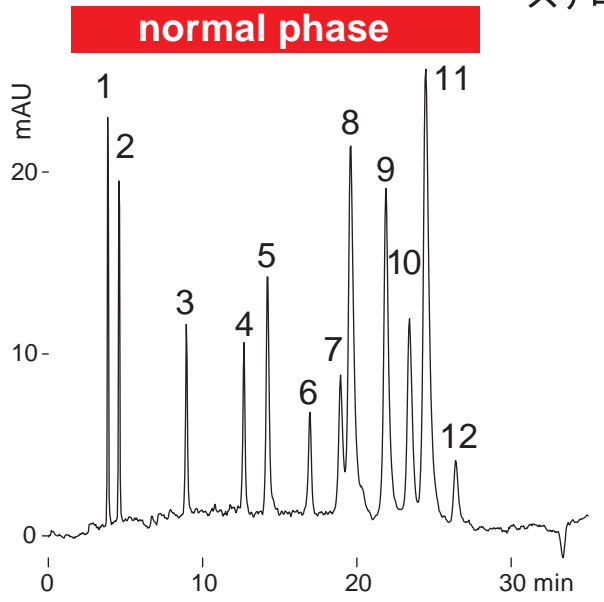
Unison UK-Amino
Unison UK-C18

250 x 4.6 mm

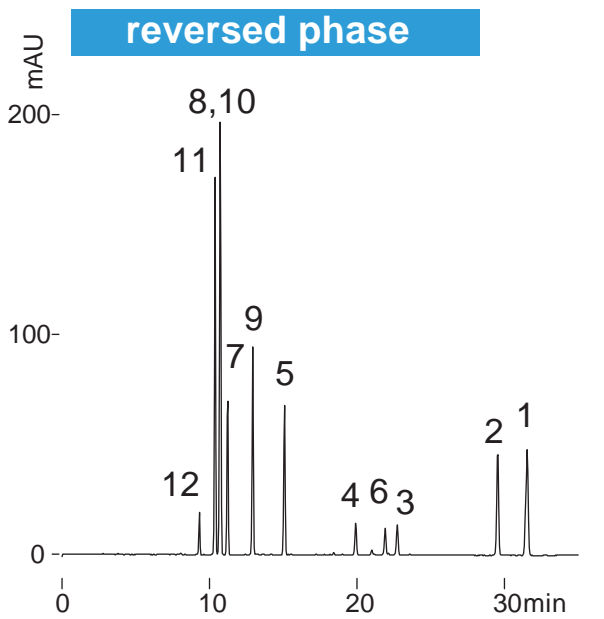
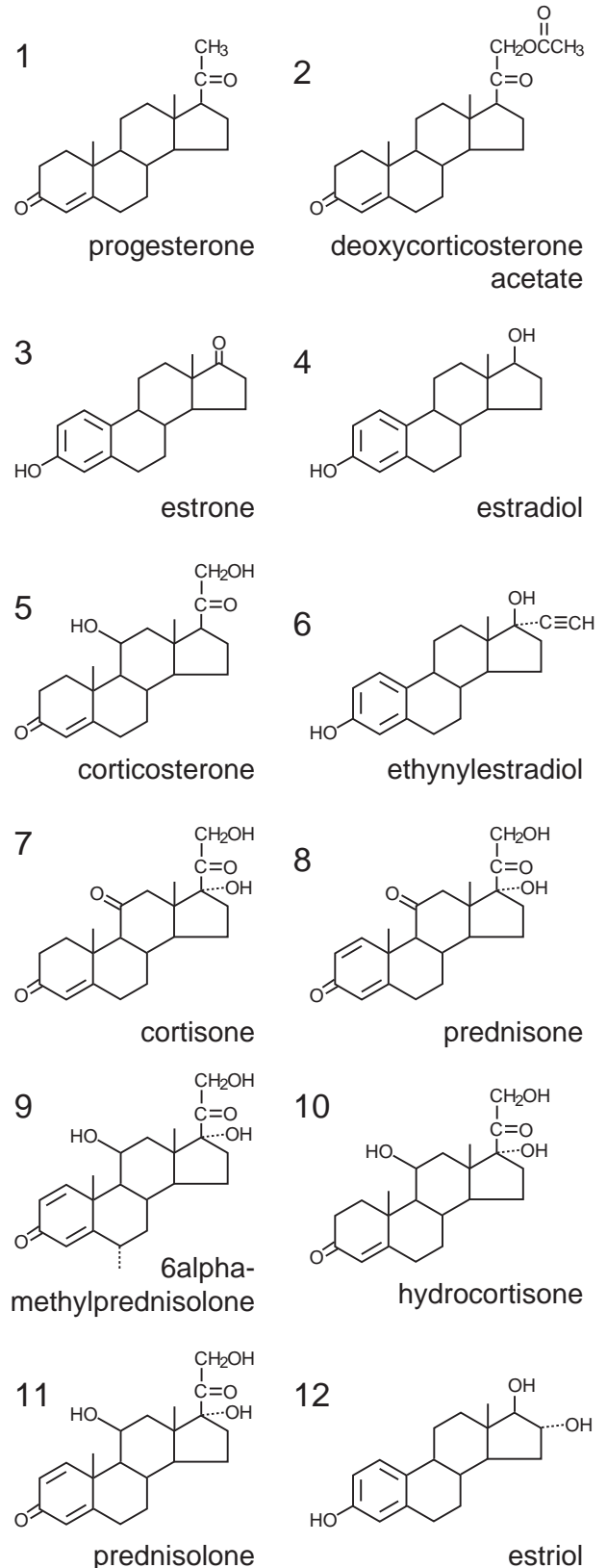
Application

Steroids

ステロイド



Unison UK-Amino, 250 x 4.6 mm
A: hexane / acetic acid = 100 / 0.1
B: ethanol / acetic acid = 100 / 1
10-30%B (0-30 min), 1 mL/min
37 deg.C, 260 nm, 2 uL (1-2ug)



Unison UK-C18, 250 x 4.6 mm
A: water, B: acetonitrile
30-70%B (0-30 min), 0.8 mL/min
37 deg.C, 260 nm, 2 uL (1-2ug)

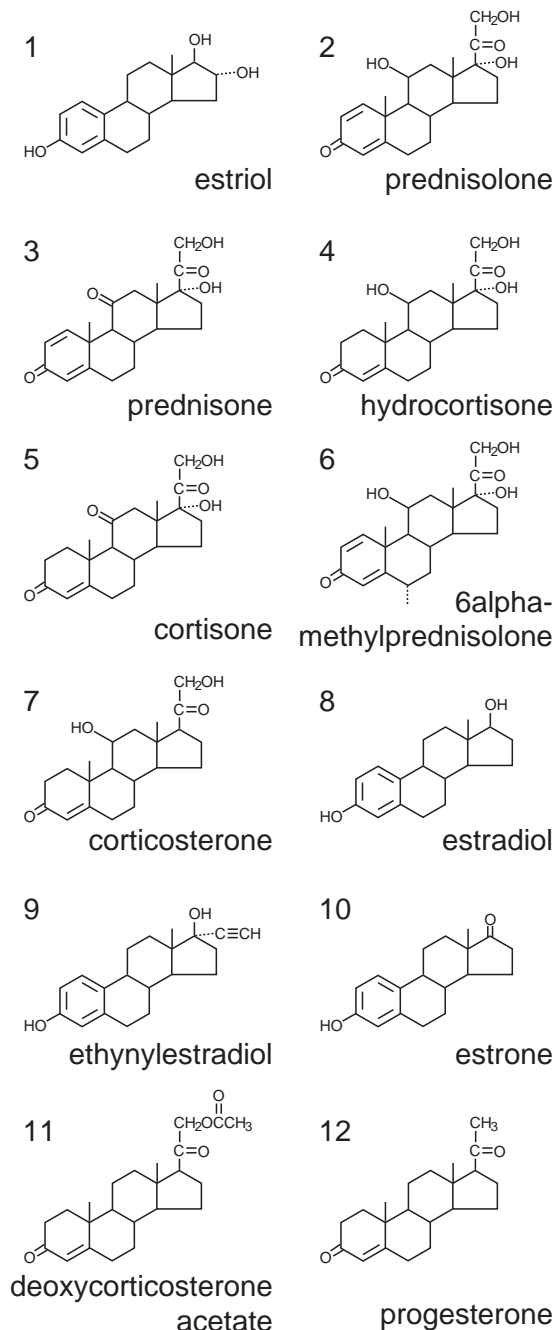
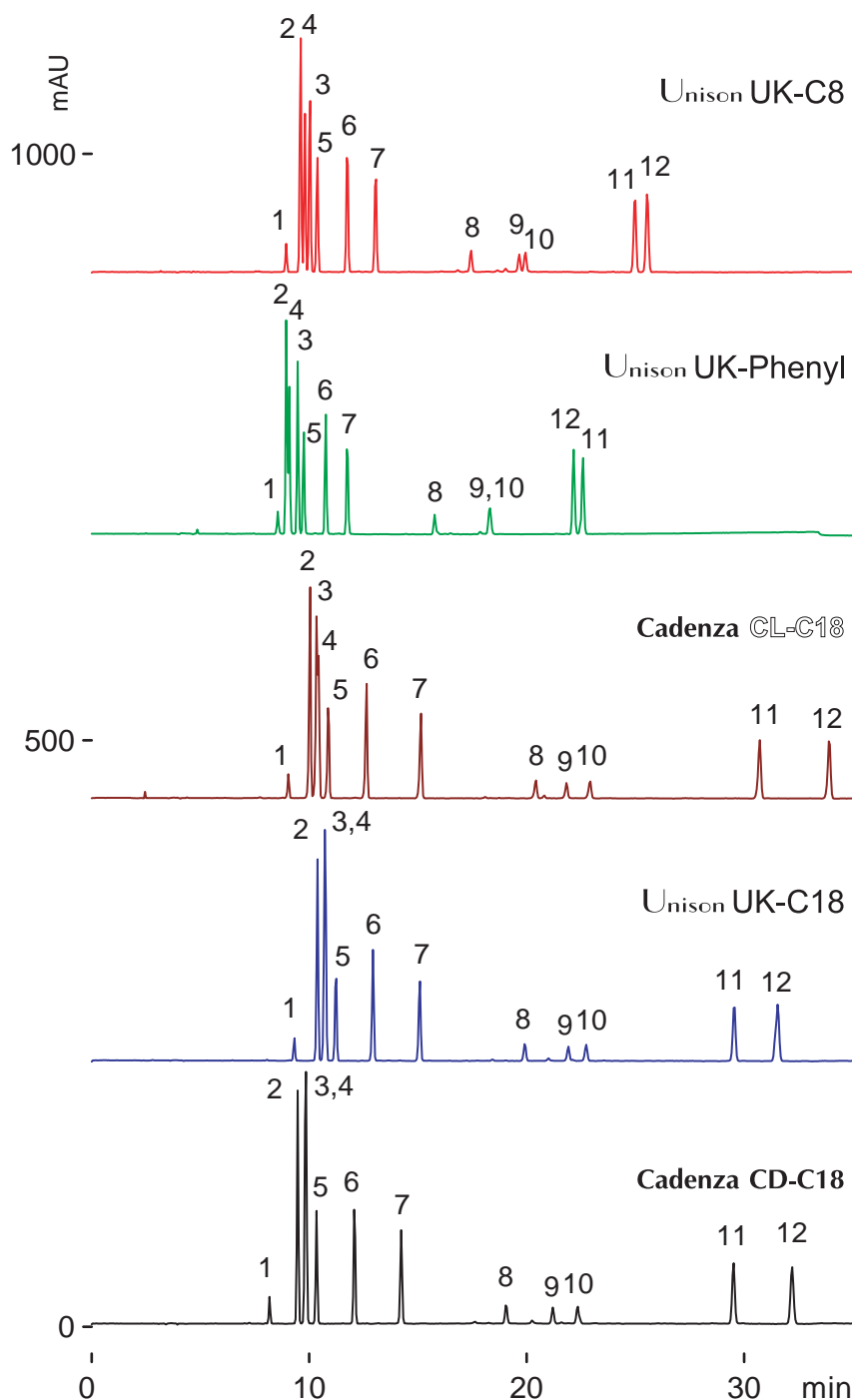
Unison UK-C8
 Unison UK-Phenyl
 Cadenza CL-C18
 Unison UK-C18
 Cadenza CD-C18

250 x 4.6 mm

Application

Steroid Hormones

ステロイドホルモン



250 x 4.6 mm
 A: water, B: acetonitrile
 30-70%B (0-30min), 70-90%B (30-33min)
 0.8 mL/min , 37 deg.C, 260 nm

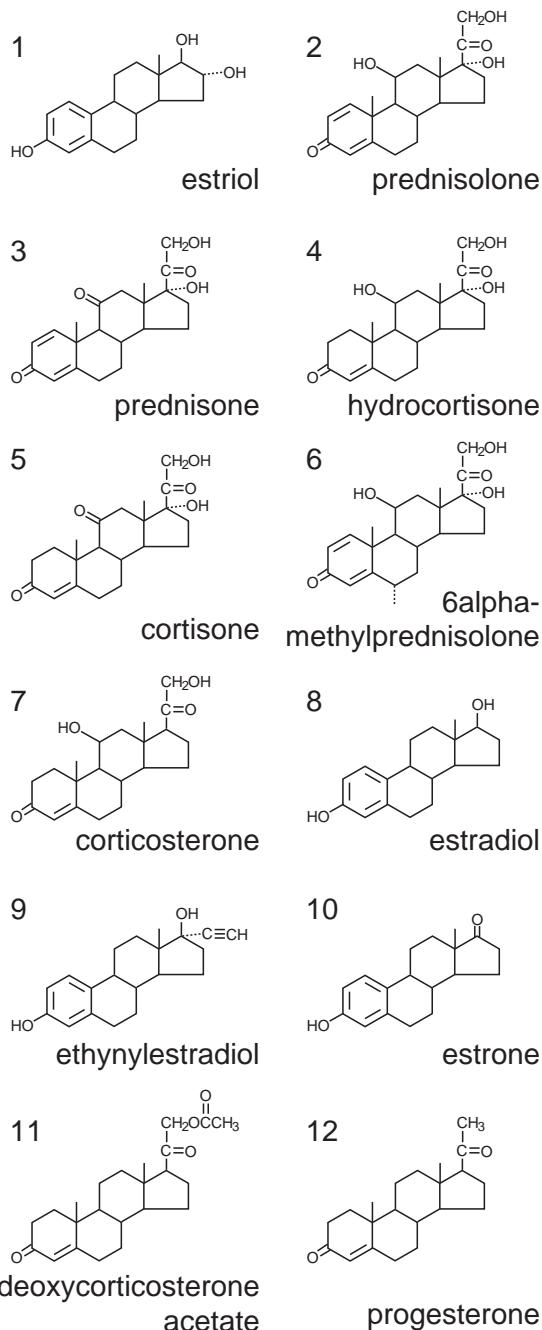
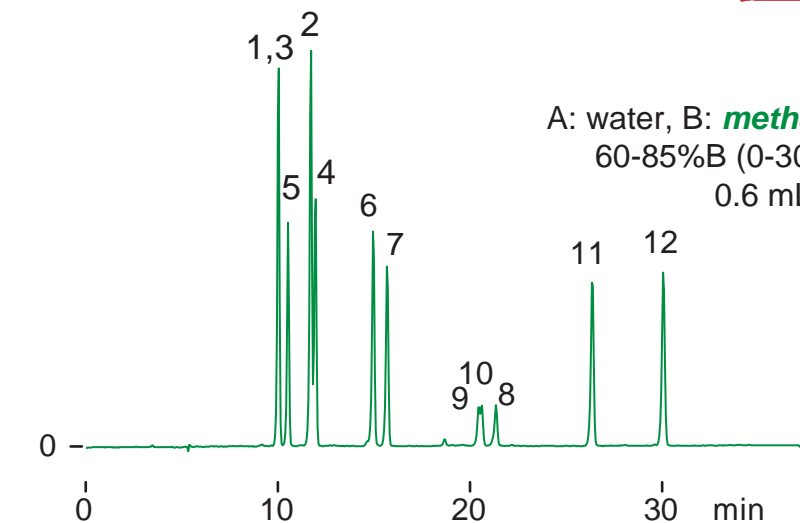
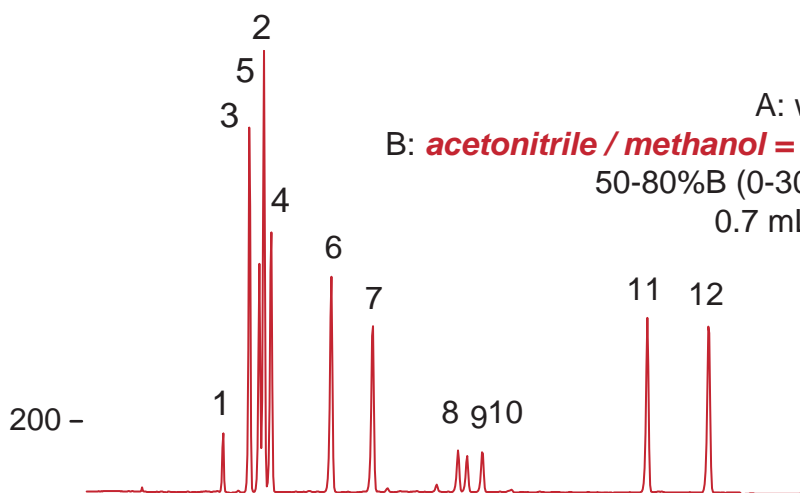
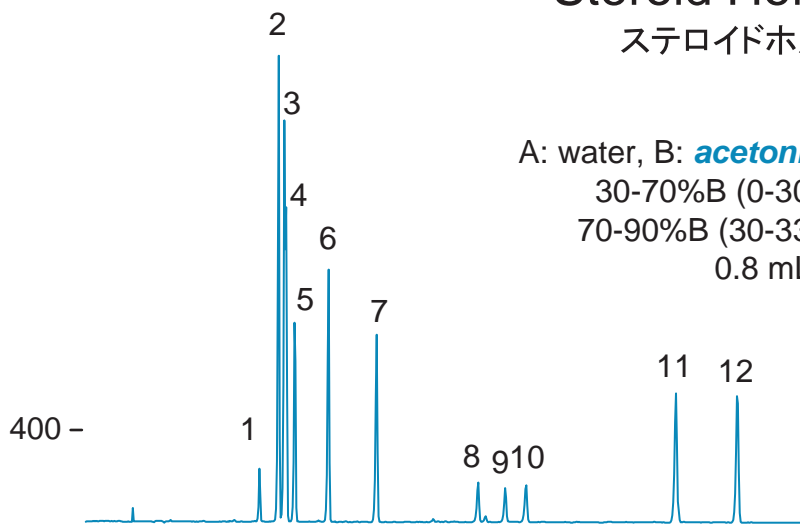
Cadenza CL-C18

250 x 4.6 mm

Application

Steroid Hormones

ステロイドホルモン



Cadenza CL-C18, 250 x 4.6 mm
37 deg.C, 260 nm

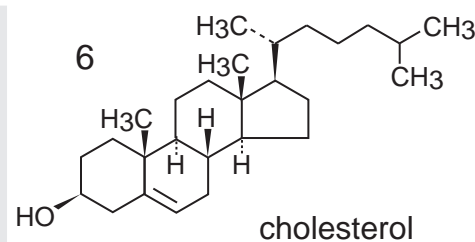
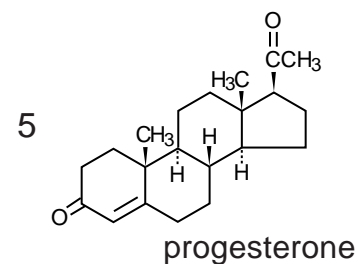
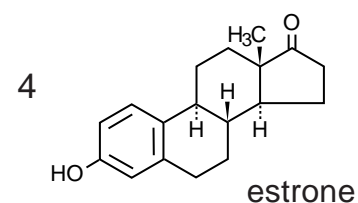
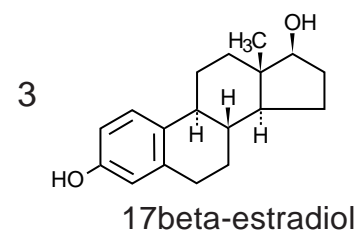
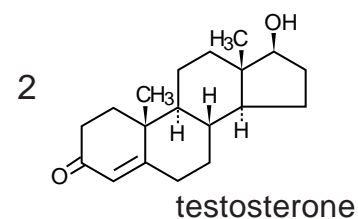
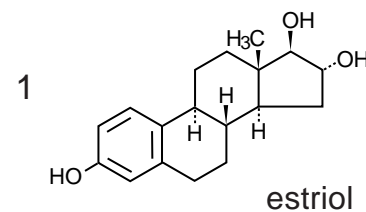
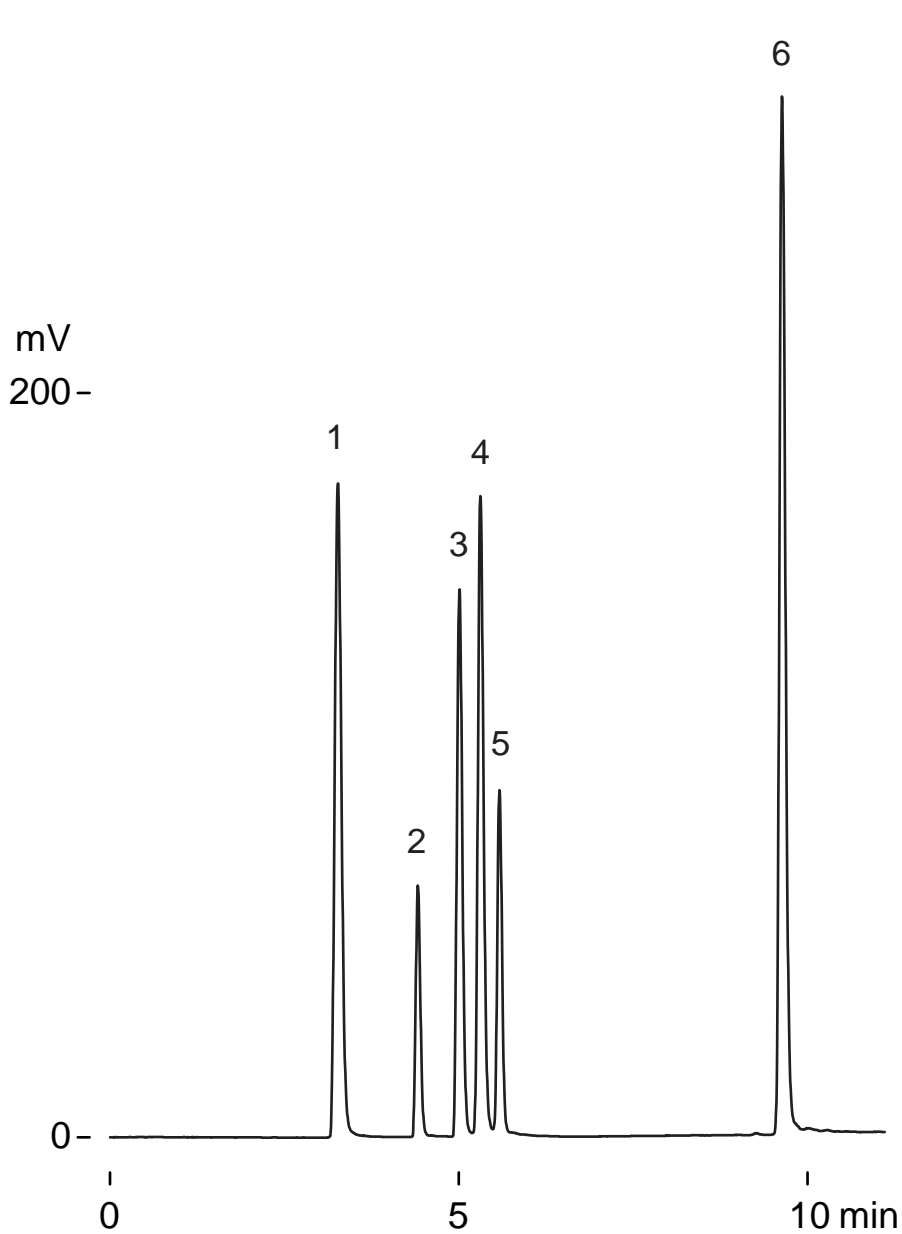
Unison UK-Phenyl

100 x 2 mm

Application

Cholesterol and Sex Steroid Hormones

コレステロールと性ステロイドホルモン



Unison UK-Phenyl, 100 x 2 mm

A: water

B: acetonitrile / tetrahydrofran = 50 / 50

30-100%B (0-10 min), 0.2 mL/min

37 deg.C, ELSD, 1.5uL(1.5ug)

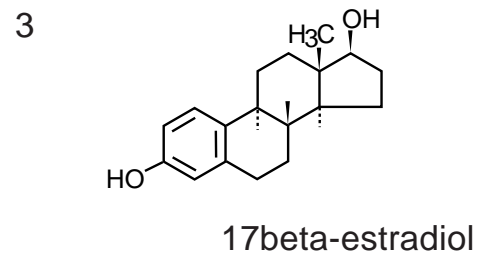
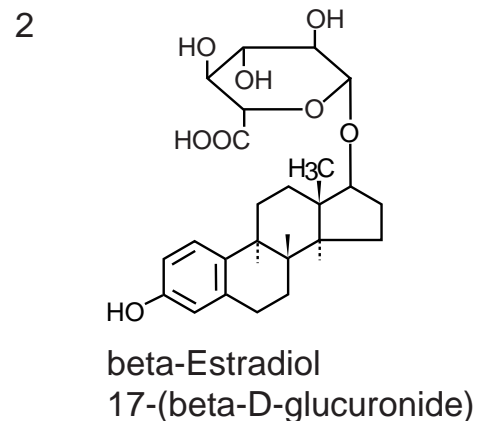
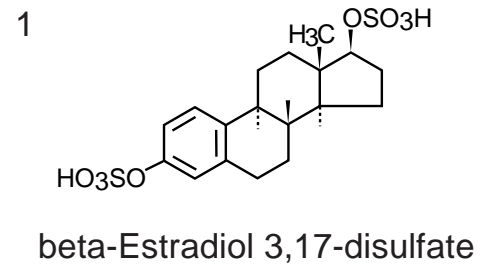
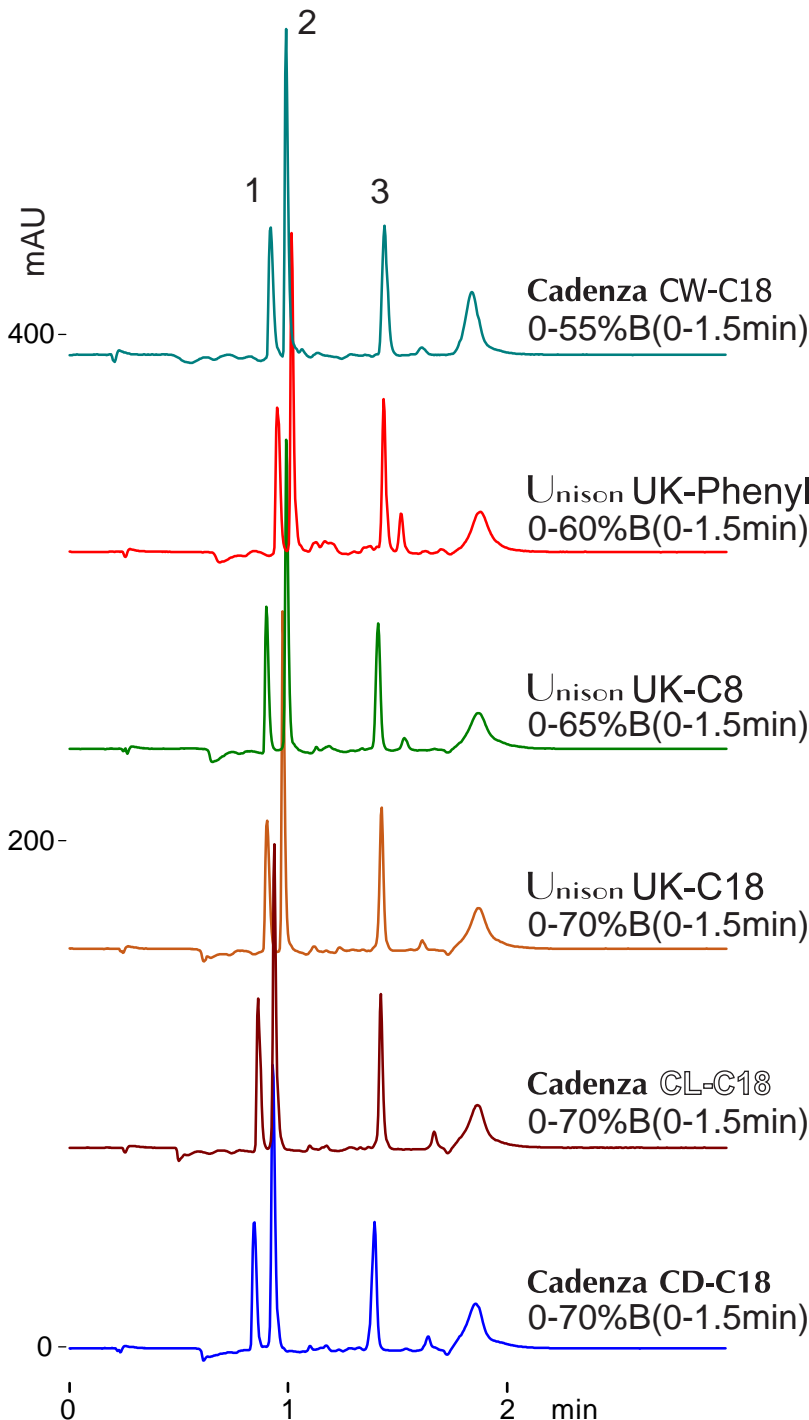
Cadenza CW-C18
 Unison UK-Phenyl
 Unison UK-C8
 Unison UK-C18
 Cadenza CL-C18
 Cadenza CD-C18

30 x 2 mm

Application

Estradiol and Metabolites

エストラジオールと代謝物



30 x 2 mm,
 A: 50mM ammonium acetate
 B: acetonitrile
 0.5 mL/min, 37 deg.C
 280 nm, 1 uL (50-250ng)

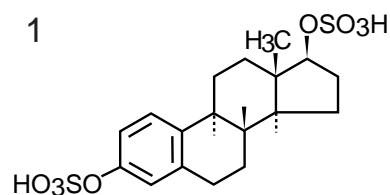
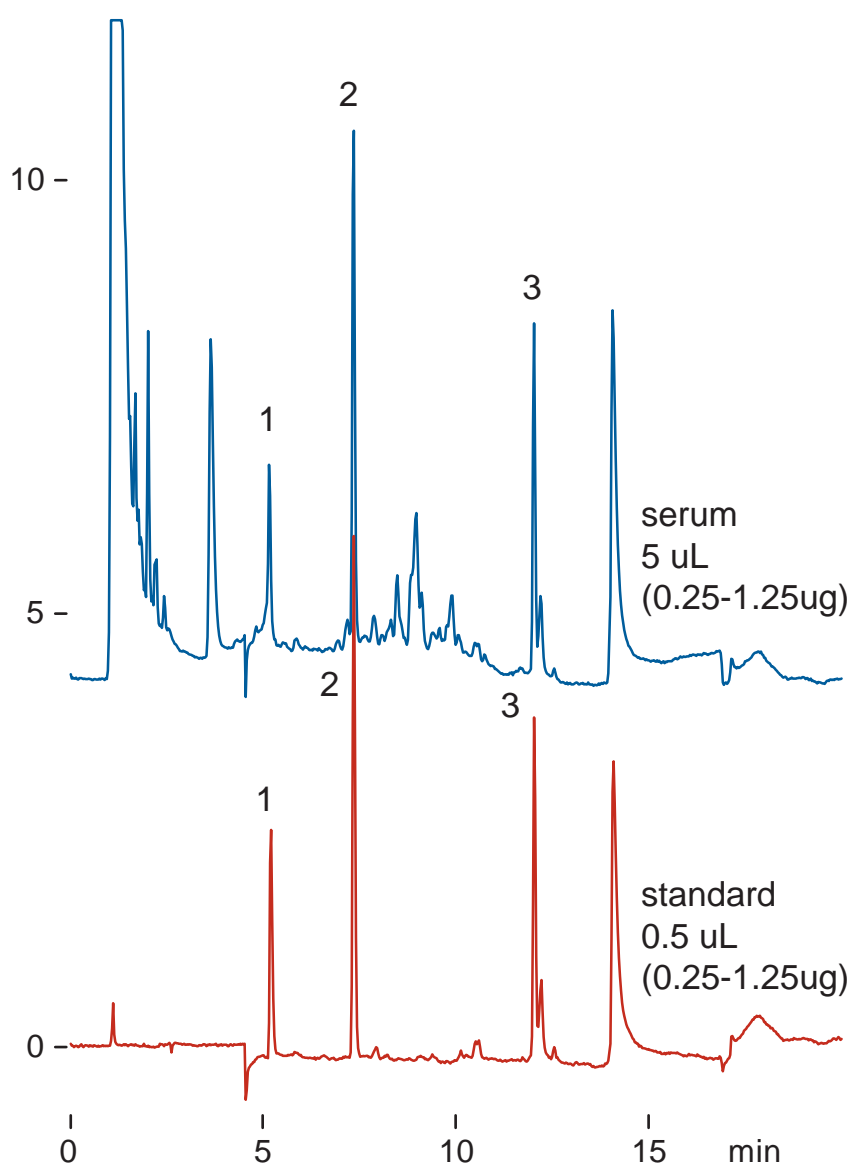
Cadenza HS-C18

150 x 3 mm

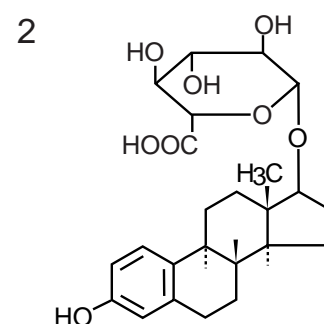
Application

Estradiol and Metabolites in Bovine Serum

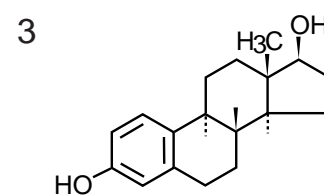
血清中のエストラジオールと代謝物



beta-Estradiol 3,17-disulfate



beta-Estradiol
17-(beta-D-glucuronide)



17beta-estradiol

Cadenza HS-C18, 150 x 3 mm,
A: 50mM ammonium acetate
B: acetonitrile
0-65%B(0-15min)
0.4 mL/min, 37 deg.C, 280 nm

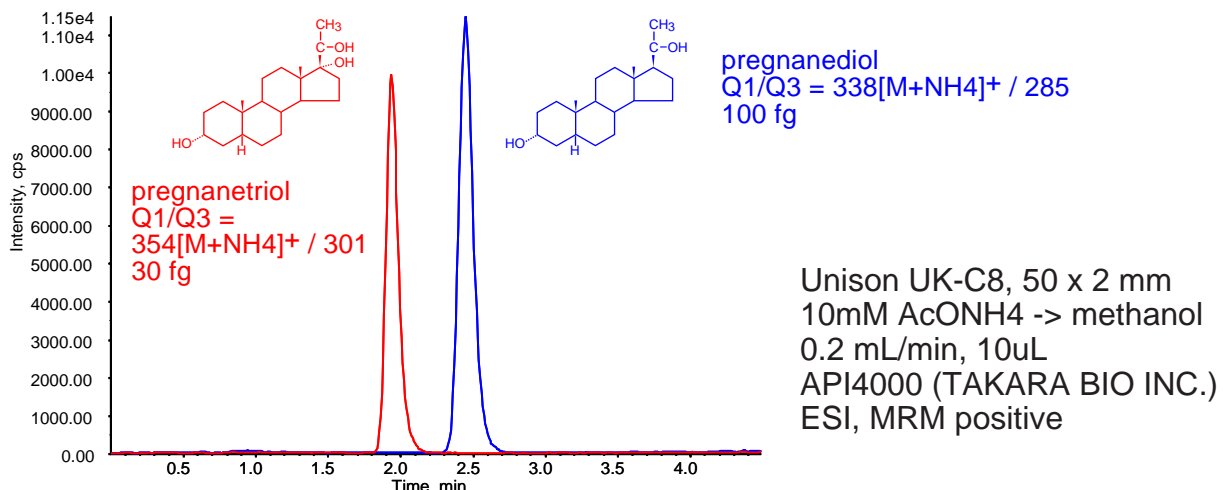
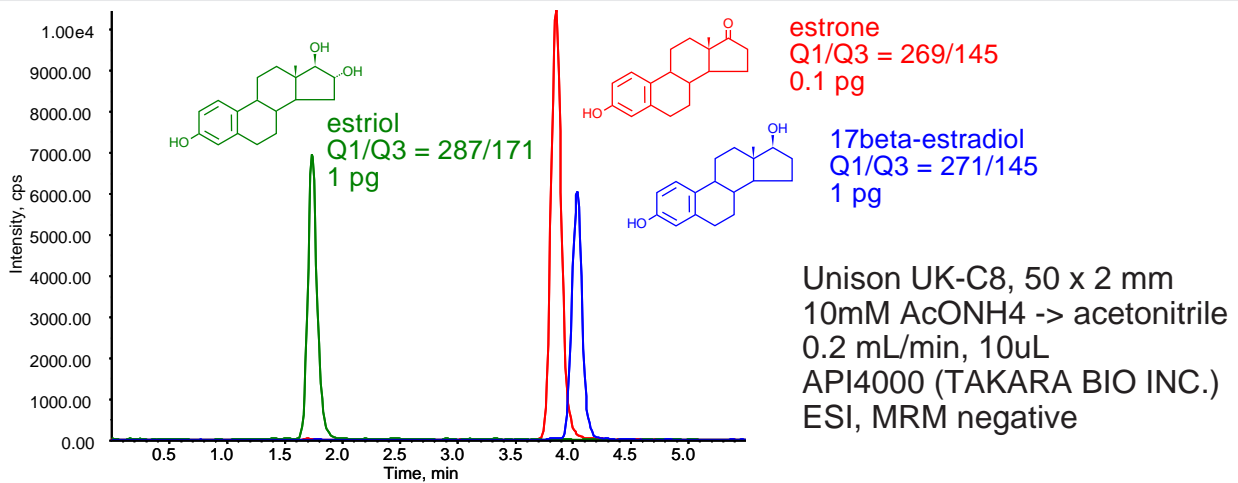
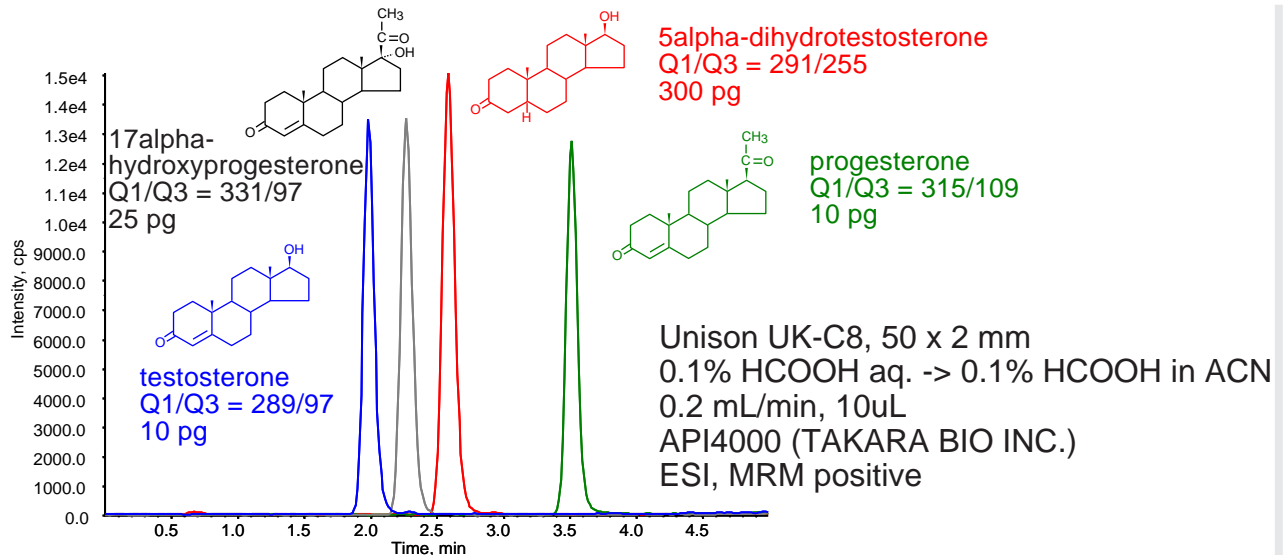
Unison UK-C8

50 x 2 mm

Application

LC-MS/MS Application - Steroid Hormones and Metabolites

ステロイドホルモンと代謝物のLC-MS/MS分析



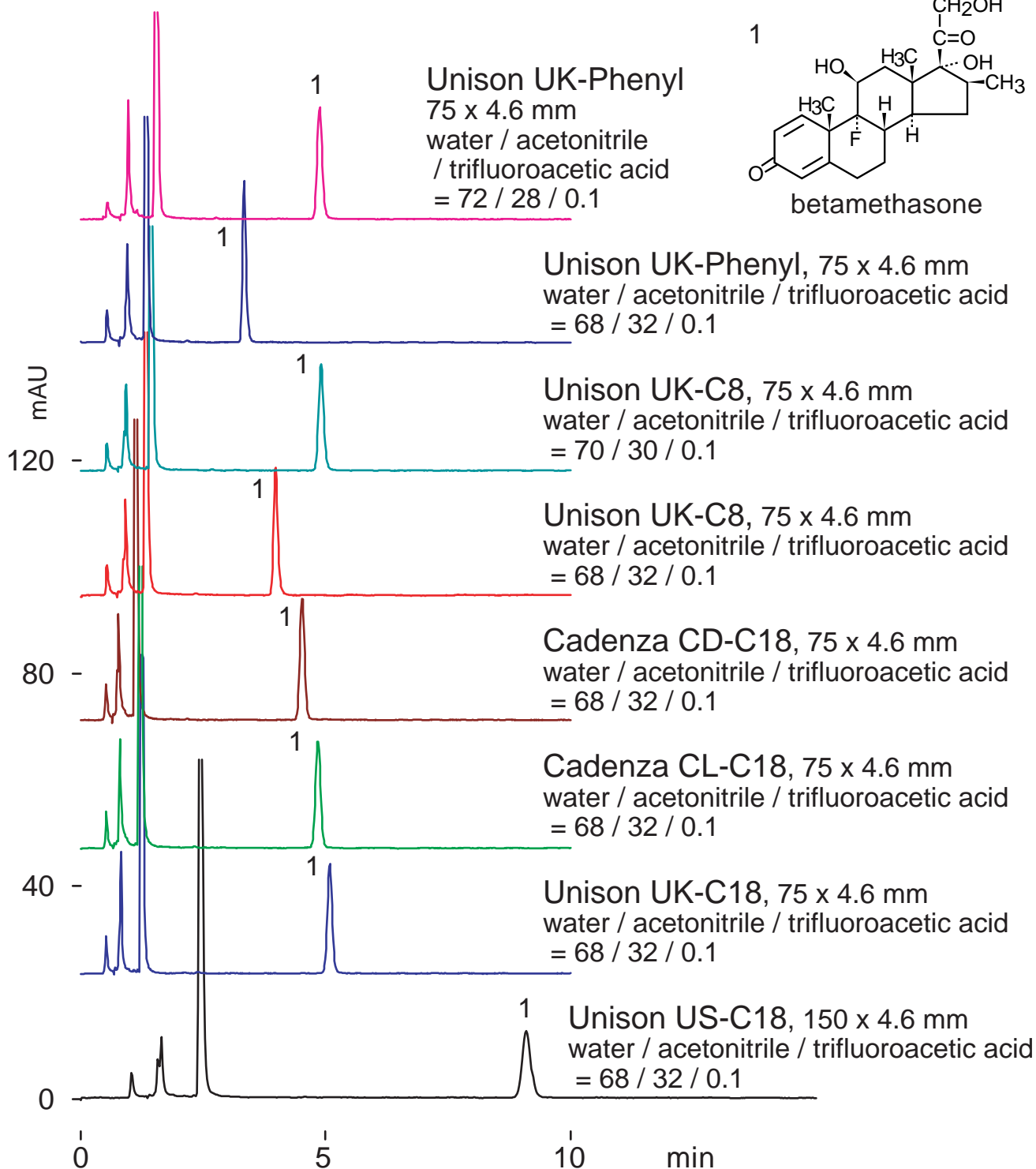
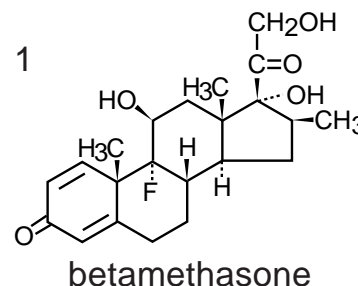
Courtesy of TAKARA BIO INC.

Unison UK-Phenyl Cadenza CD-C18 75 x 4.6 mm
 Unison UK-C8 Unison UK-C18 150 x 4.6 mm
 Cadenza CL-C18 Unison US-C18

Application

Betamethasone (Antihistamine:Adrenal corticosteroid)

ベタメタゾン(抗ヒスタミン薬:副腎皮質ホルモン薬)



1 mL/min (4-5MPa), 37 deg.C, 260 nm, 1 uL (0.25ug, DMSO)

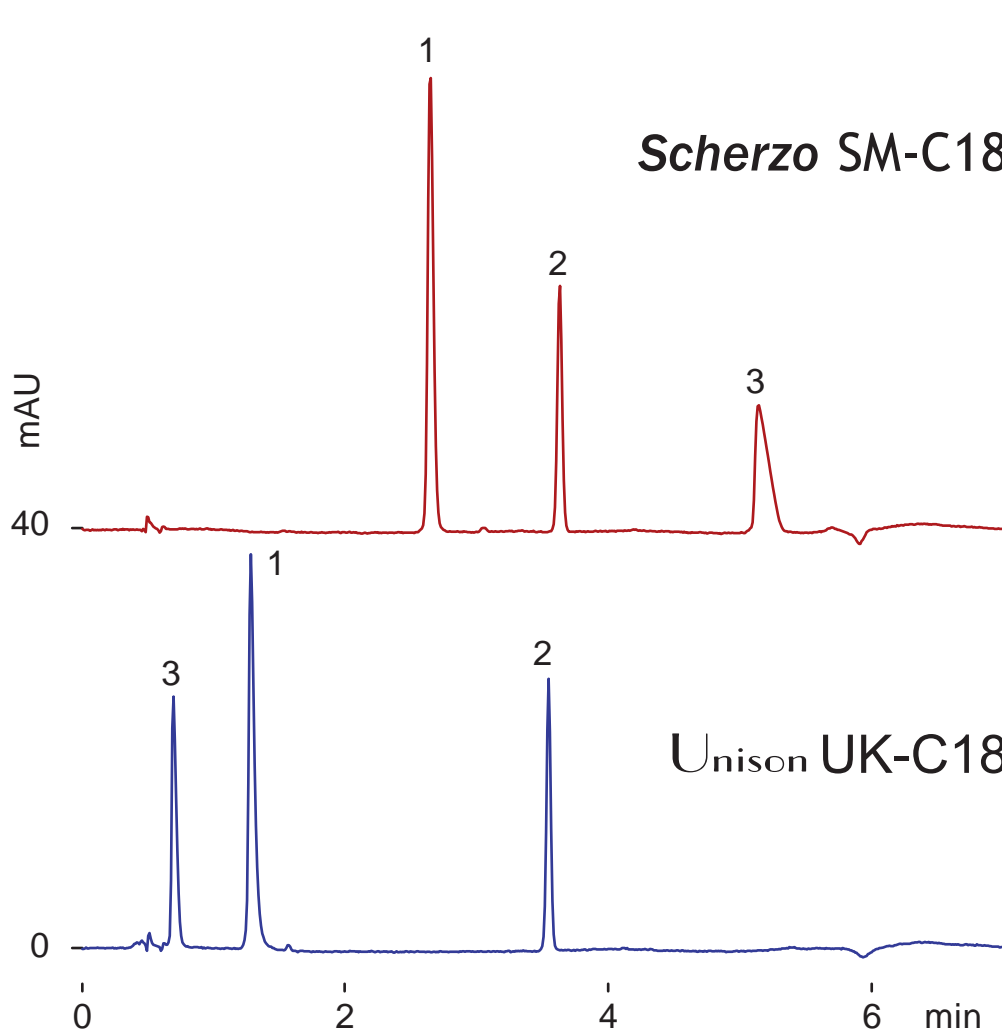
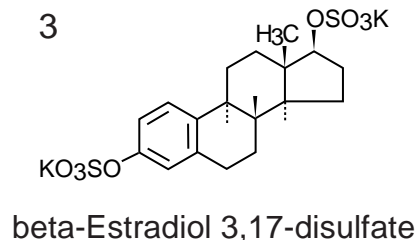
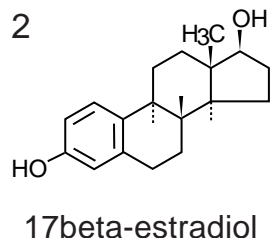
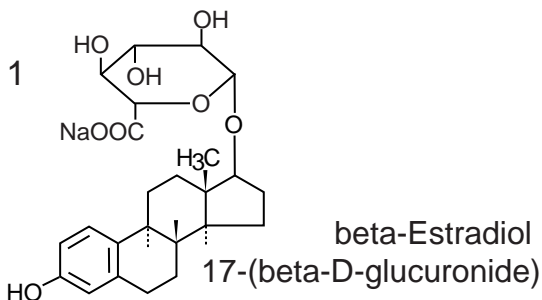
Scherzo SM-C18
Unison UK-C18

50 x 3 mm

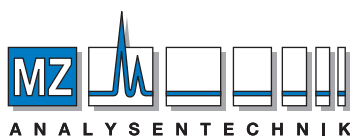
Application

Estradiol and metabolites

エストラジオールと代謝物



50 x 3 mm
A: 5mM ammonium acetate
B: 125mM ammonium acetate / acetonitrile = 20 / 80
30-100 %B (0-5min), 0.5 mL/min (5-9MPa)
37 deg.C, 280 nm ,1uL (0.5-2.5ng)



AUTHORIZED DISTRIBUTOR

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