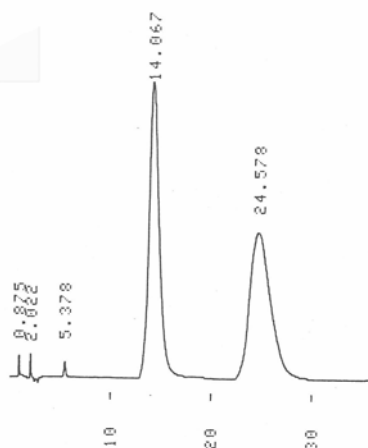
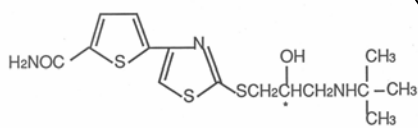


Application Data

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ULTRON ES-OVM	...	13
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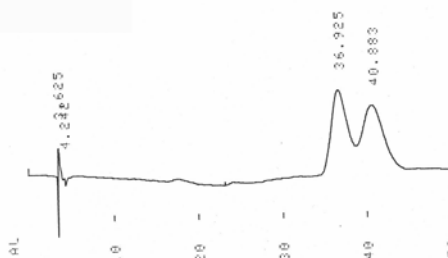
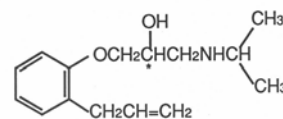
β -blockers

Arotinolol



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 6.0) / CH₃CN = 100 / 5
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

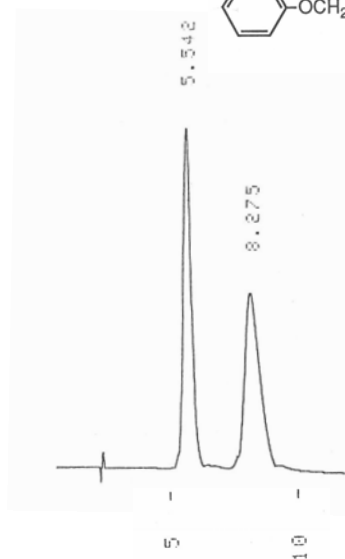
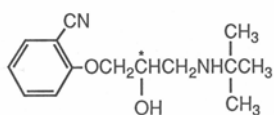
Alprenolol



Column: ULTRON ES-OVM
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.5) / CH₃CN = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

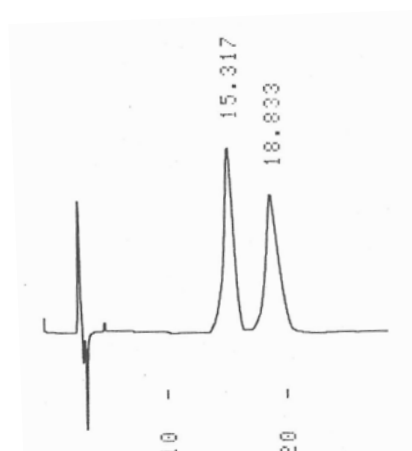
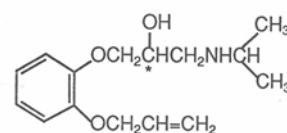
β -blockers

Bunitrolol



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 6.0) / C₂H₅OH = 100 / 3
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Oxprenolol

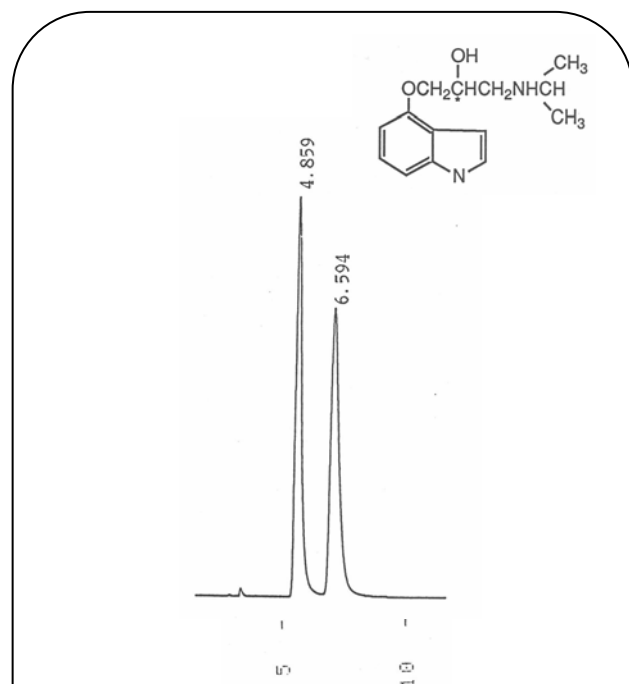


Column: ULTRON ES-OVM
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 6.0) / CH₃CN = 100 / 10
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

ULTRON ES-OVM

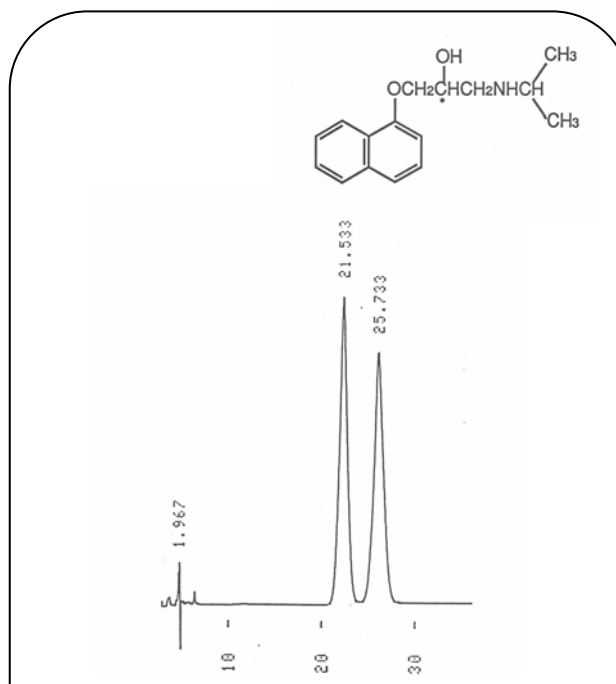
β -blockers

Pindolol



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH_2PO_4 (pH 5.5) / $\text{C}_2\text{H}_5\text{OH}$ = 100 / 30
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

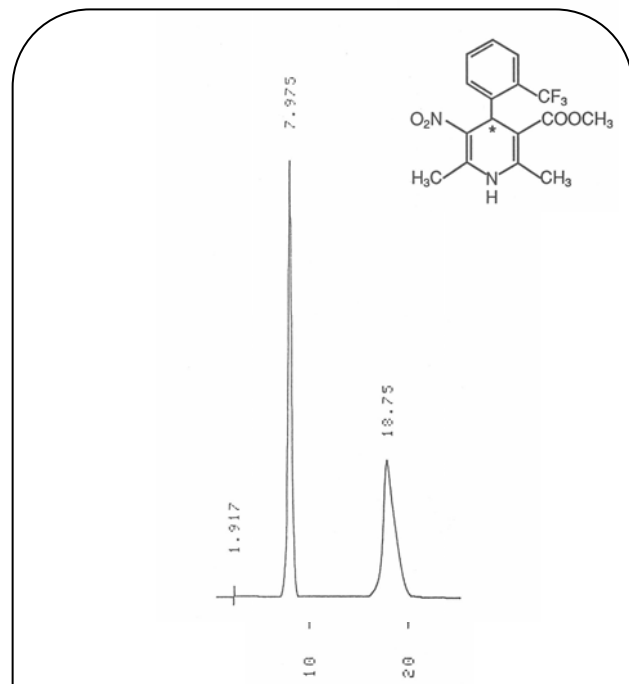
Propranolol



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH_2PO_4 (pH 6.8) / CH_3CN = 100 / 30
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

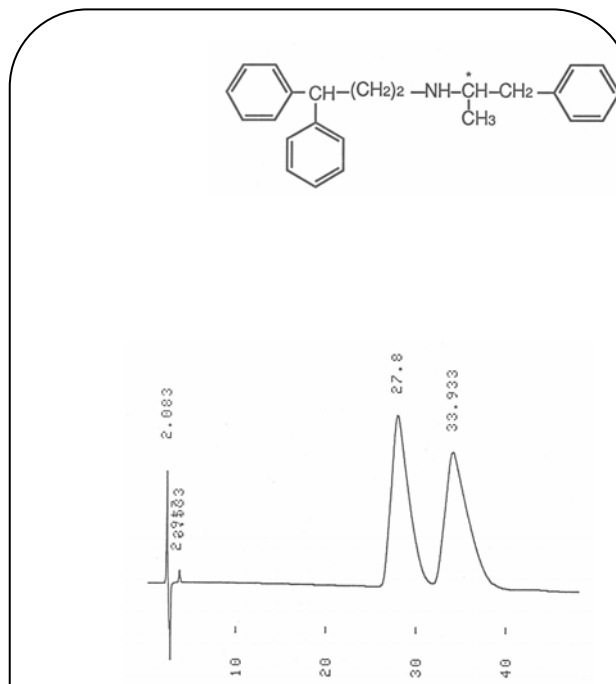
Calcium Antagonists

Bay K 8644



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH_2PO_4 (pH 4.6) / $\text{C}_2\text{H}_5\text{OH}$ = 100 / 25
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

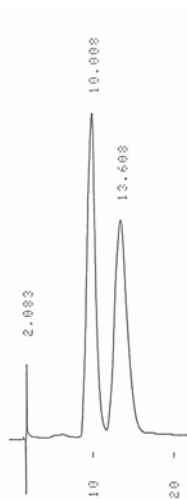
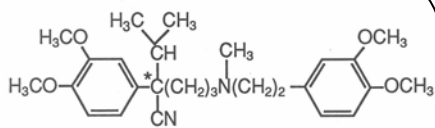
Prenylamine



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH_2PO_4 (pH 5.0) / CH_3CN = 100 / 15
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Calcium Antagonists

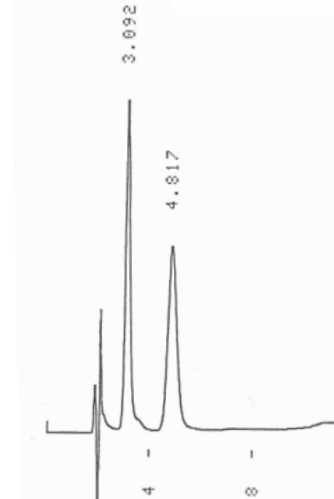
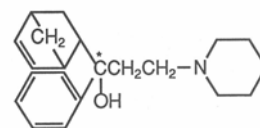
Verapamil



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 5
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Antiparkinsons

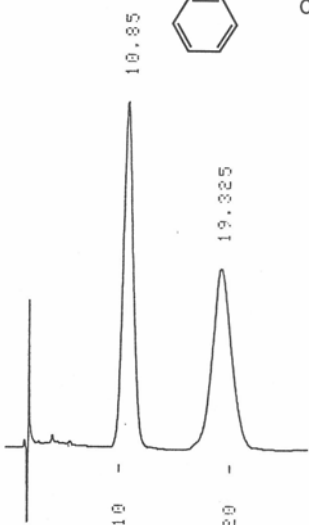
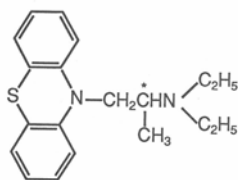
Biperiden



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

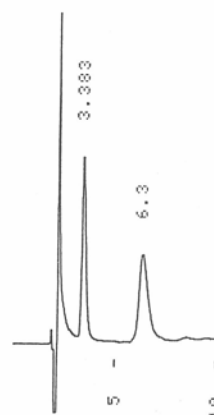
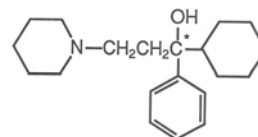
Antiparkinsons

Profenamine



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 25
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

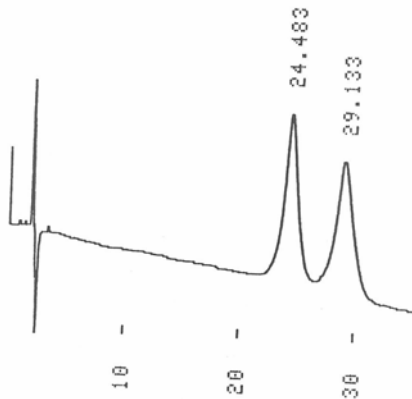
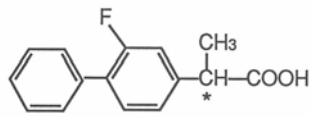
Trihexyphenidyl



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

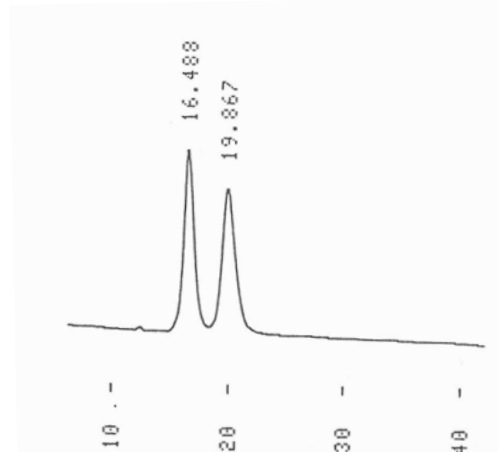
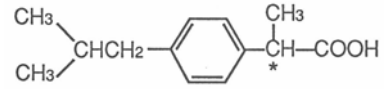
Antiinflammatoryes

Flurbiprofen



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 3.0) / CH₃CN = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

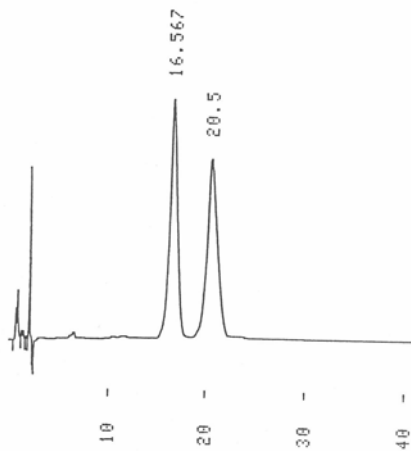
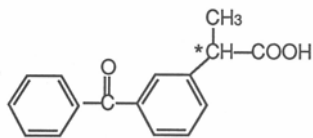
Ibuprofen



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 3.0) / CH₃CN = 100 / 5
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

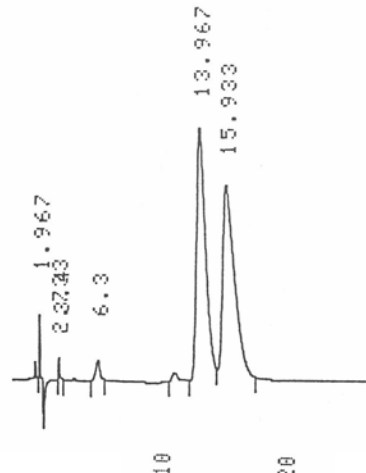
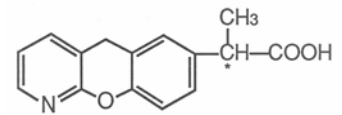
Antiinflammatoryes

Ketoprofen



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 3.0) / CH₃CN = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

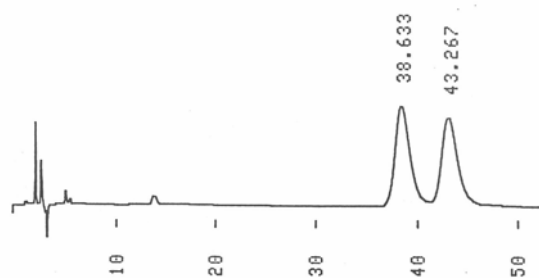
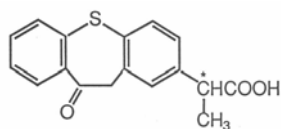
Pranoprofen



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 3.0) / CH₃CN = 100 / 8
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Antiinflammatoryies

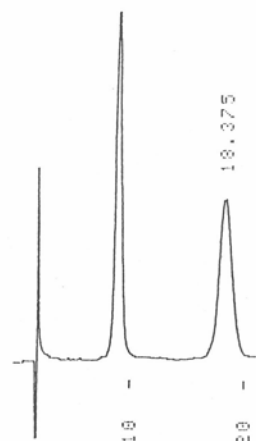
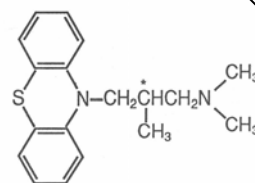
Zaltoprofen



Column: ULTRON ES-OVM
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 3.0) / CH₃CN = 87 / 13
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Antihistamines

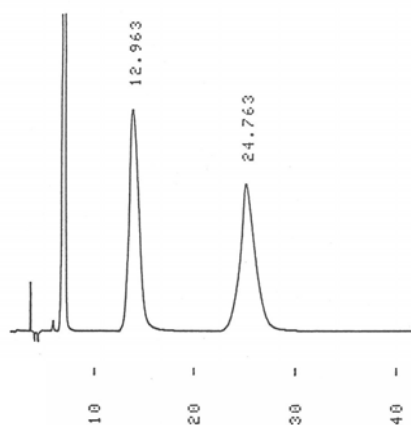
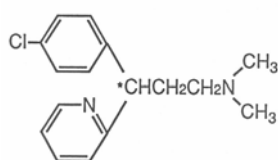
Alimemazine



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 25
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

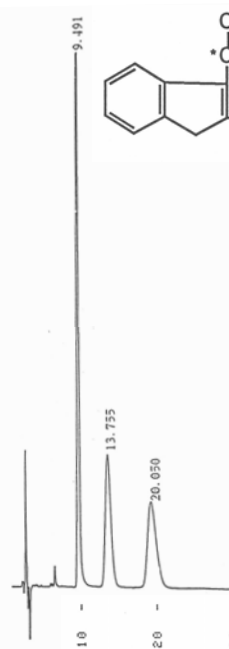
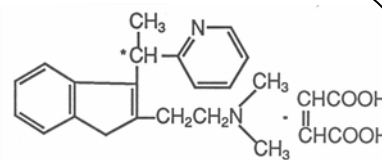
Antihistamines

Chlorpheniramine



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.0) / CH₃CN = 100 / 5
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

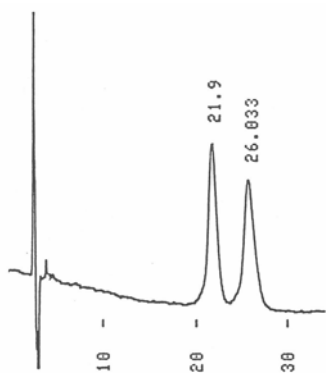
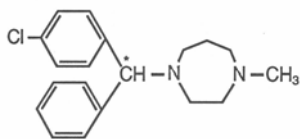
Dimethindene Maleate



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 100 / 9
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

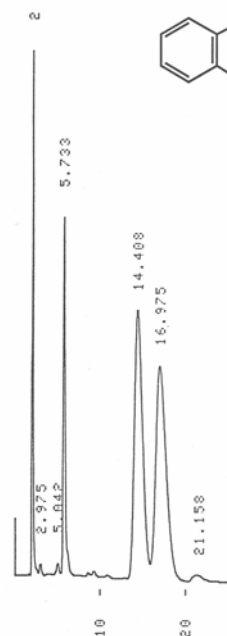
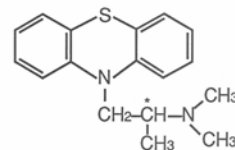
Antihistamines

Homochlorcyclizine



Column: ULTRON ES-OVM
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 20
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

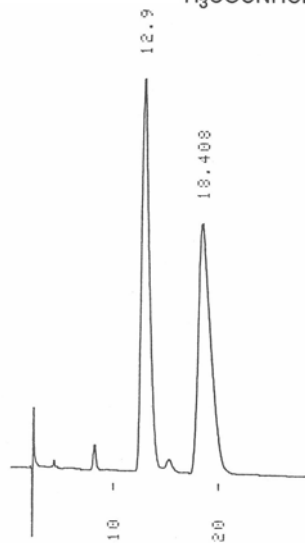
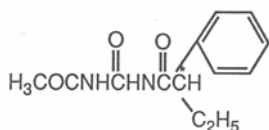
Promethazine



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 3.0) / CH₃CN = 100 / 5
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

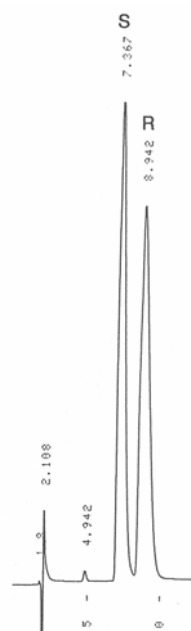
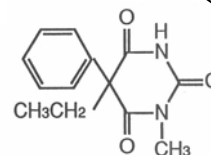
Anticonvulsants

Acetylpheneturide



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 7.5
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

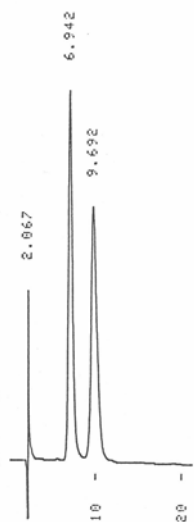
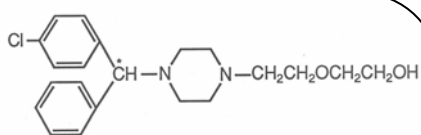
Mephobarbital



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Tranquilizers

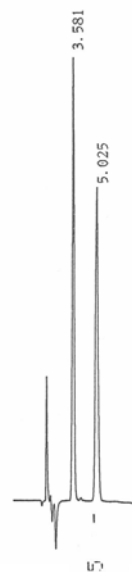
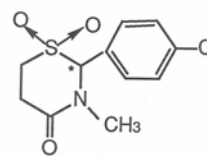
Hydroxyzine



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Skeletal Muscle Relaxants

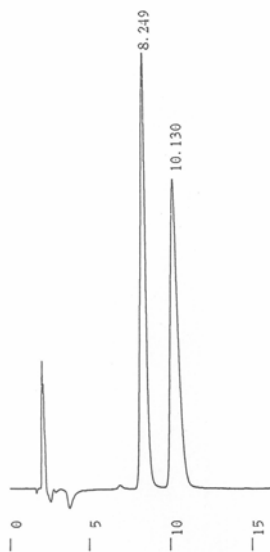
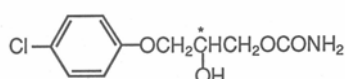
Chlormezanone



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

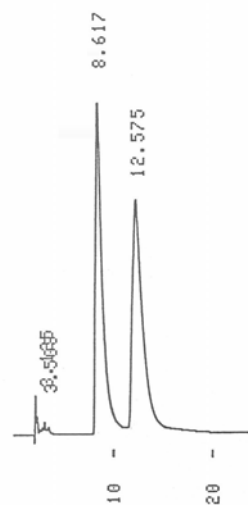
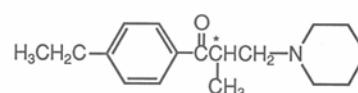
Skeletal Muscle Relaxants

Chlorphenesin



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.5)
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

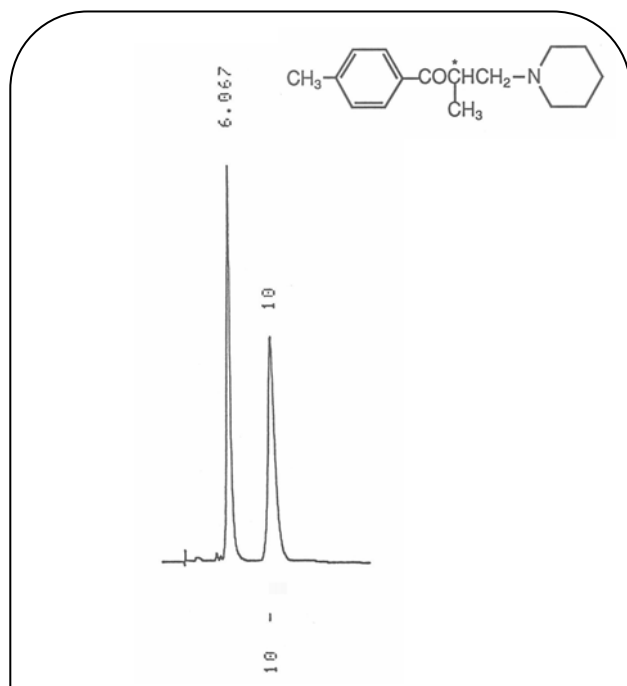
Eperisone



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.5) / C₂H₅OH = 100 / 5
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Skeletal Muscle Relaxants

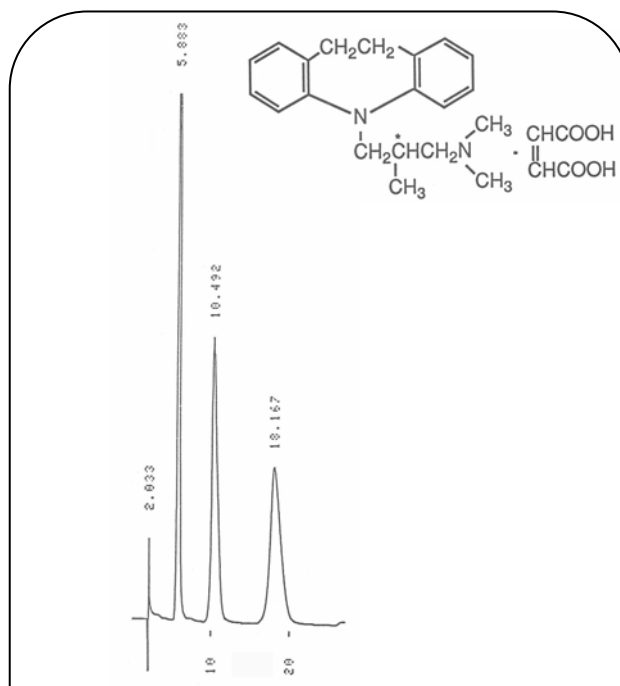
Tolperisone



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.5) / C₂H₅OH = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Antidepressants

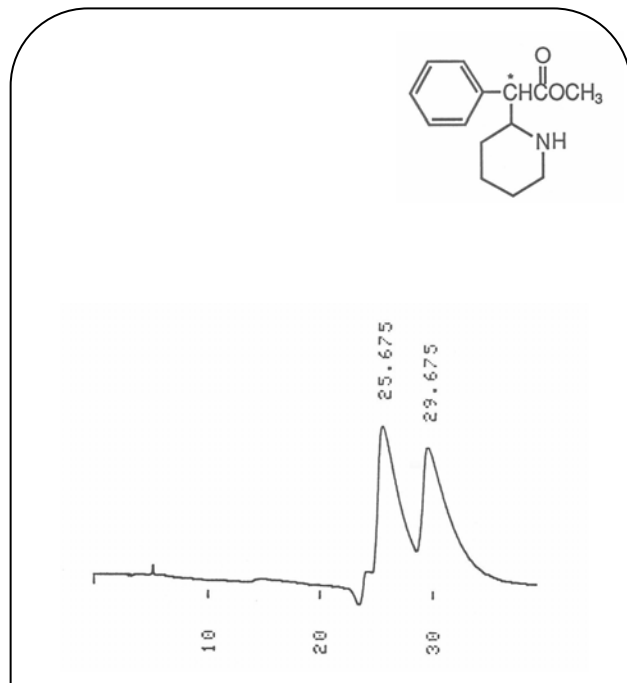
Trimipramine Maleate



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.5) / C₂H₅OH = 100 / 30
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Central Nervous System Stimulants

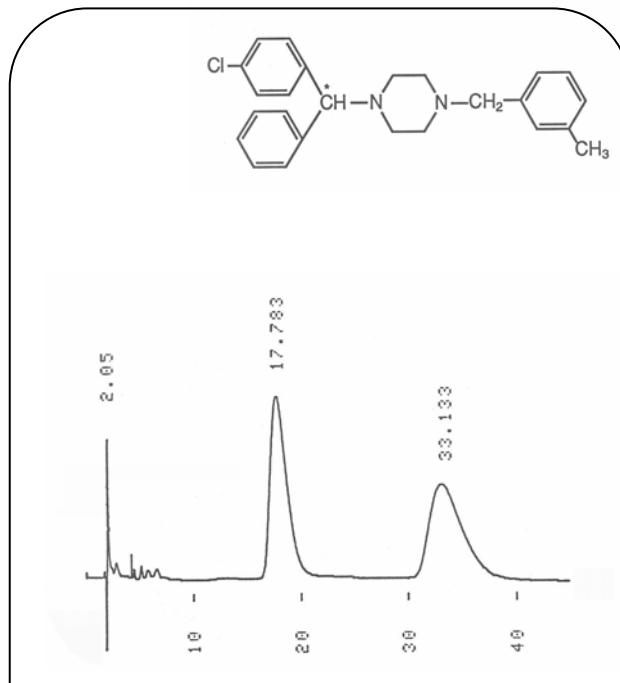
Methylphenidate



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.7)
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Drugs Used in Vertigo

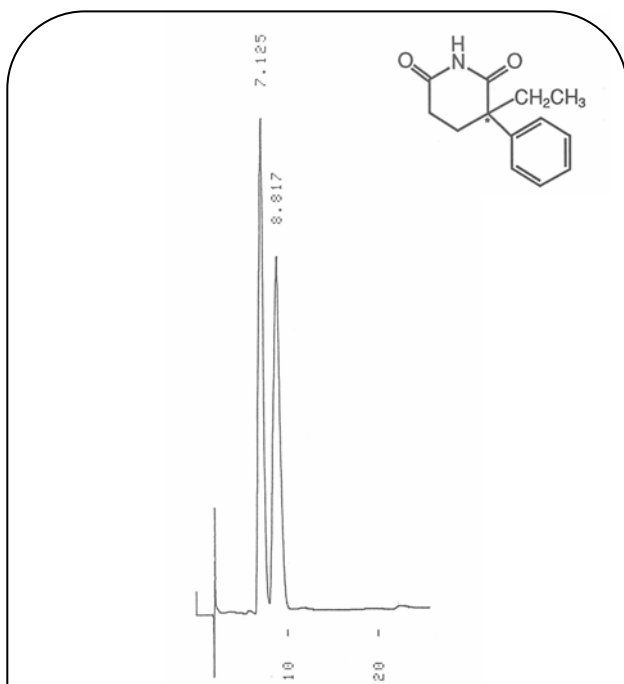
Meclizine



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 35
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

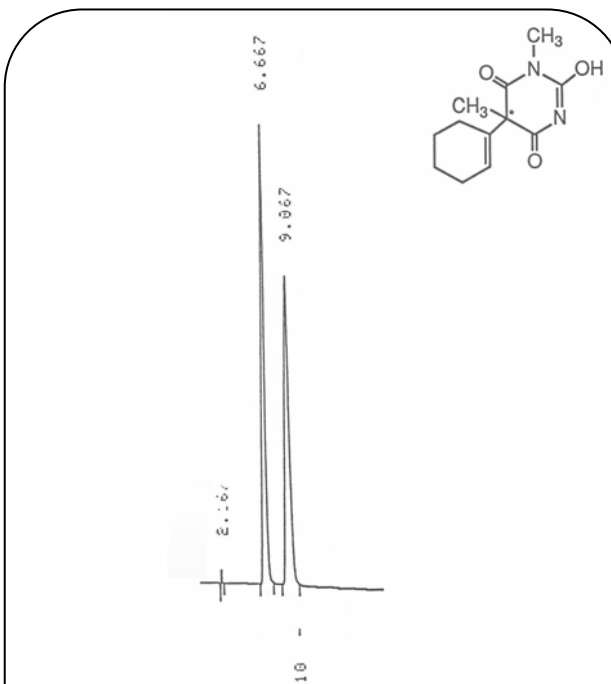
Hypnotics

Glutethimide



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

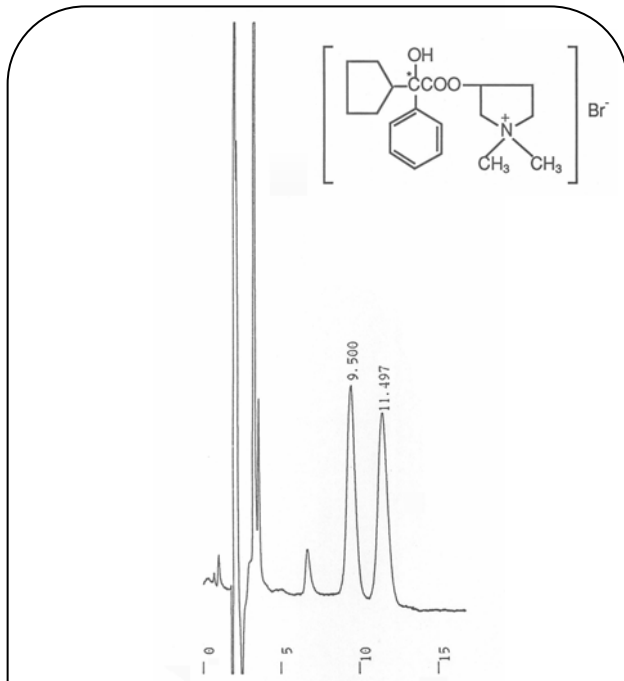
Hexobarbital



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 6.0) / C₂H₅OH = 100 / 5
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

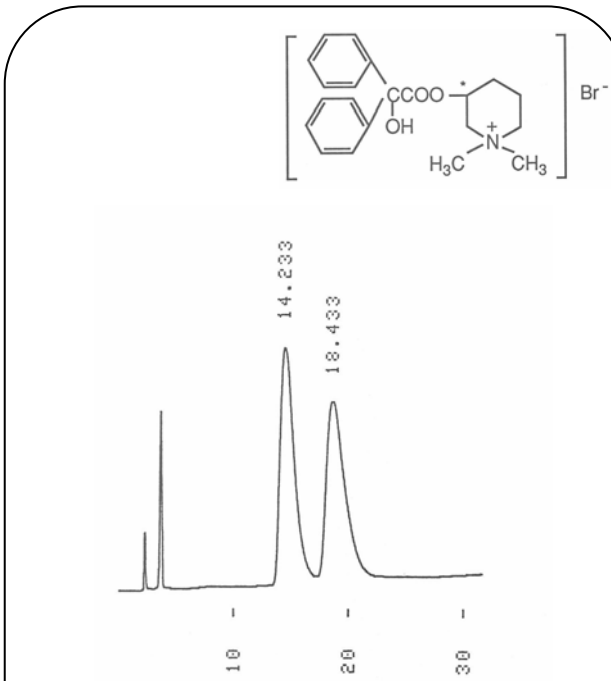
Anticholinergics

Glycopyrronium Bromide



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.5) / C₂H₅OH = 100 / 2
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

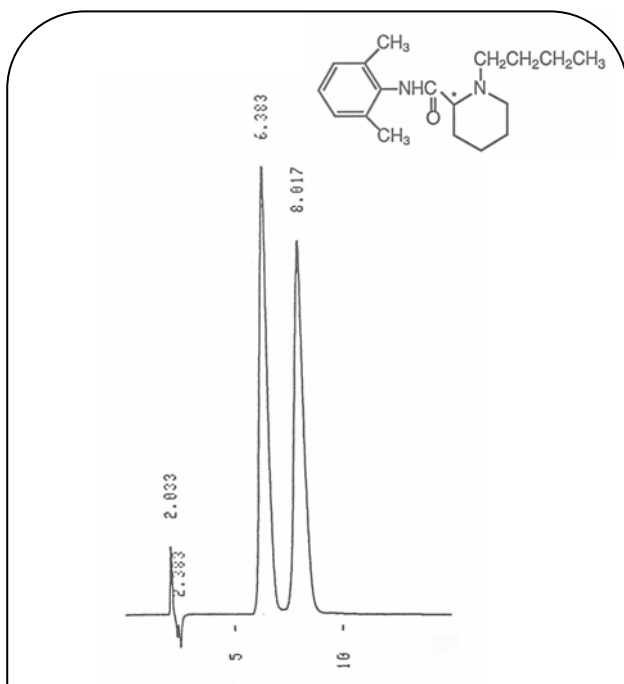
Mepenzolate Bromide



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6)
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Local Anesthetics

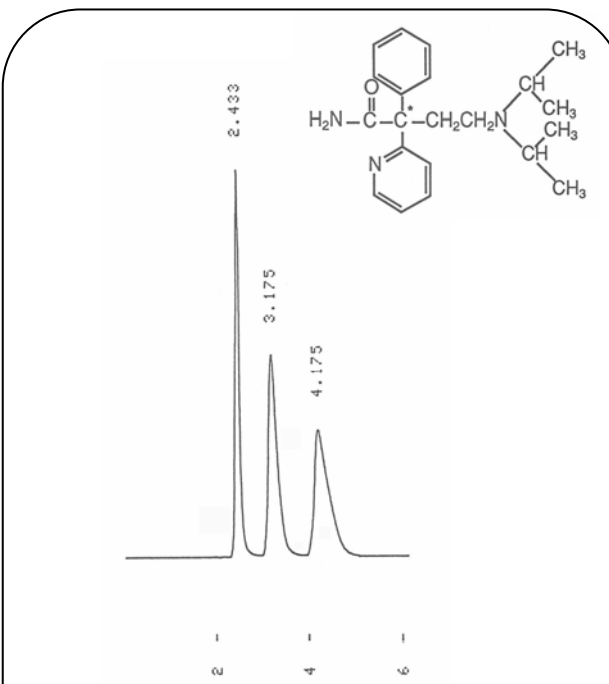
Bupivacaine



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.5) / CH₃CN = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Antidysrhythmics

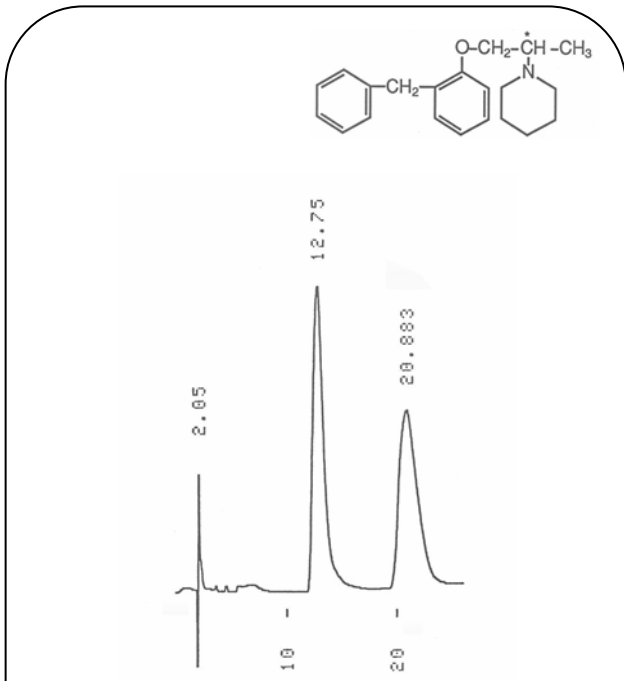
Disopyramid



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.5) / C₂H₅OH = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

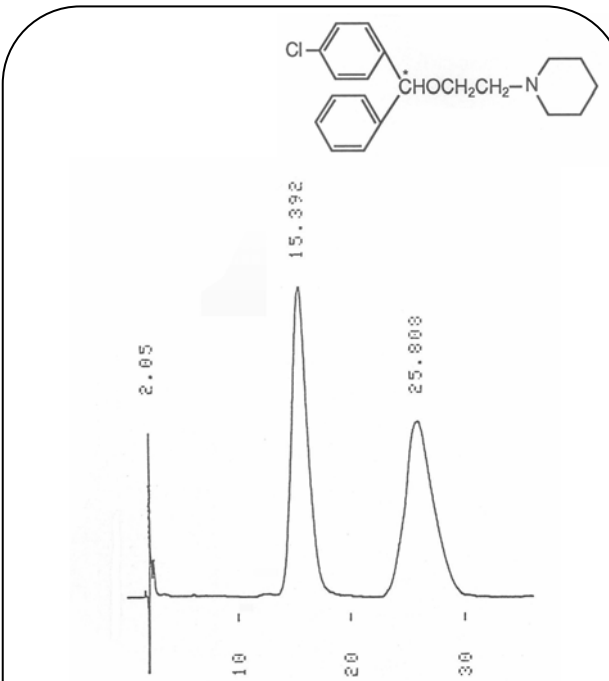
Antitussives

Benproperine



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 20
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

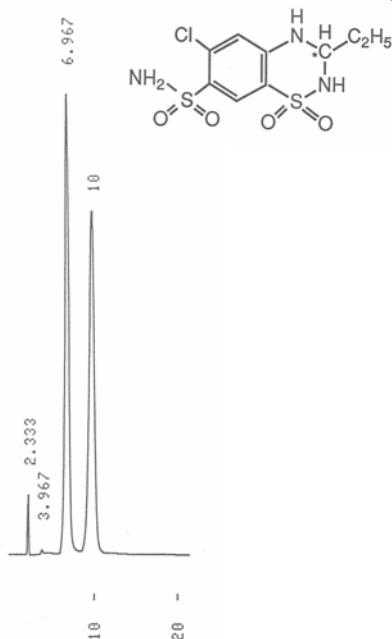
Cloperastin



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 15
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Diuretics

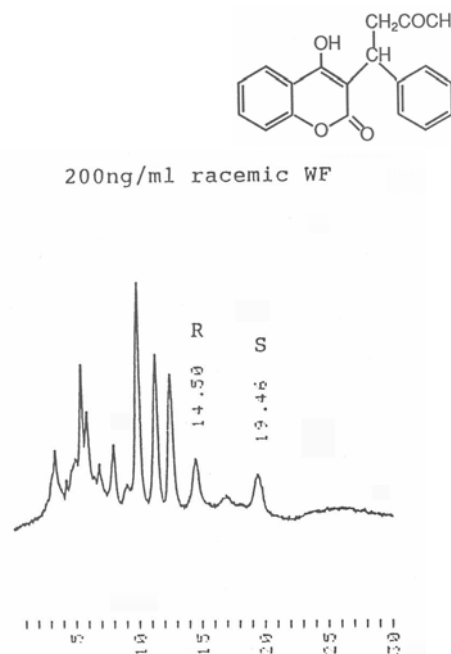
Ethiazide



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6)
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Oral Anticoagulants

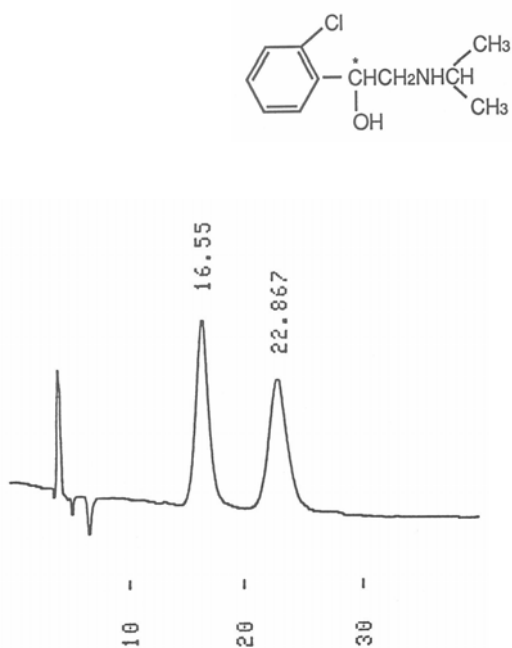
Warfarin



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 3.0) / CH₃CN = 100 / 15
 Flow Rate: 0.1 mL/min
 Temperature: 25 °C
 Detection: UV-305 nm

Bronchodilators

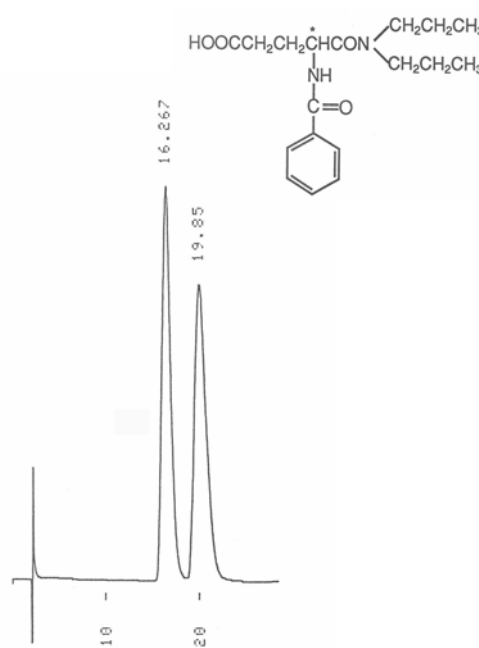
Clorprenaline



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.5) / C₂H₅OH = 100 / 3
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Drugs in Peptic Ulcer

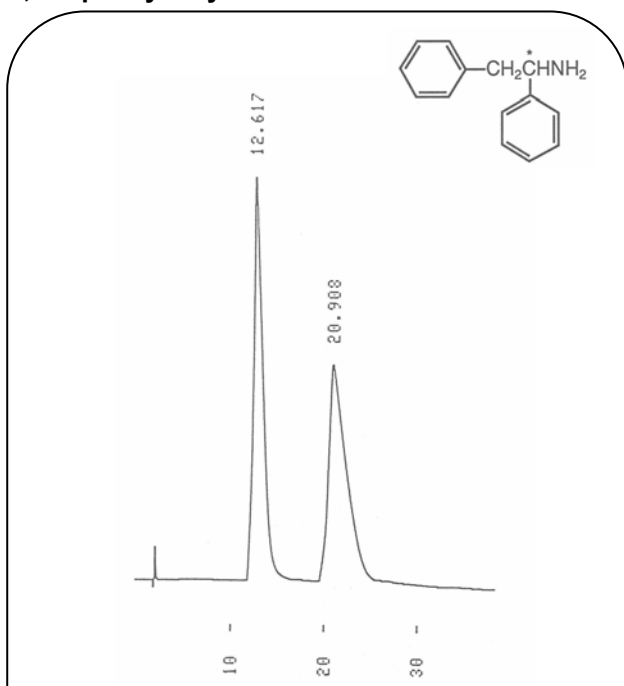
Proglumide



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 20
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Others

1,2-Diphenylethylamine



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.5)
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

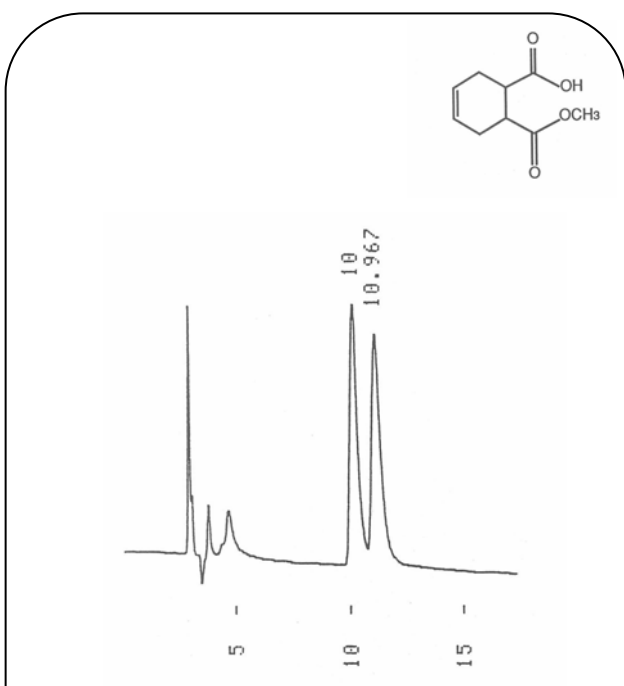
Flavanone



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 100 / 30
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-254 nm

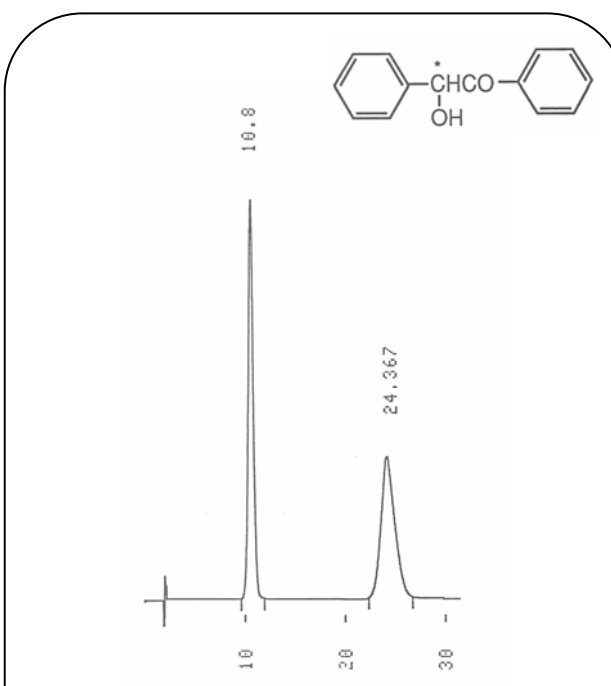
Others

(1S,2R)-1-Methyl-cis-1,2,3,6-tetrahydrophthalate



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.0) / CH₃CN = 100 / 5
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

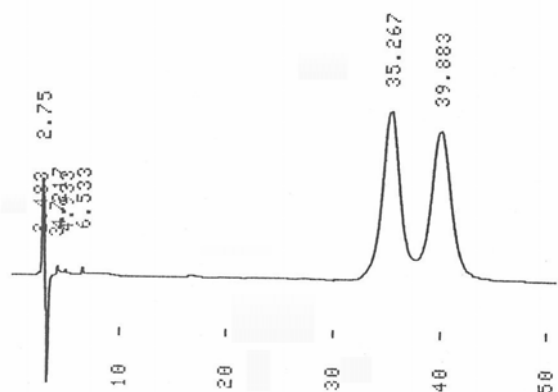
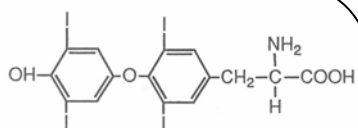
Benzoin



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / C₂H₅OH = 100 / 10
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-250 nm

Others

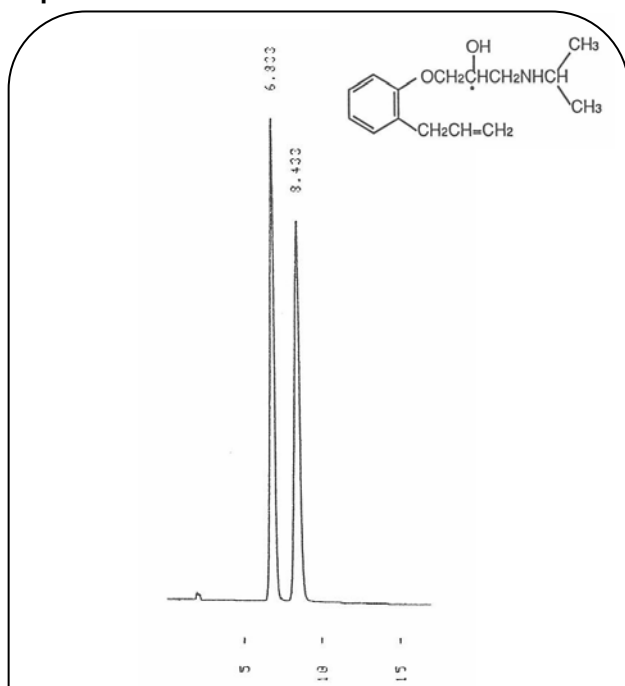
Thyroxine



Column: ULTRON ES-OVM
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 100 / 20
 Flow Rate: 1.2 mL/min
 Temperature: 15 °C
 Detection: UV-220 nm

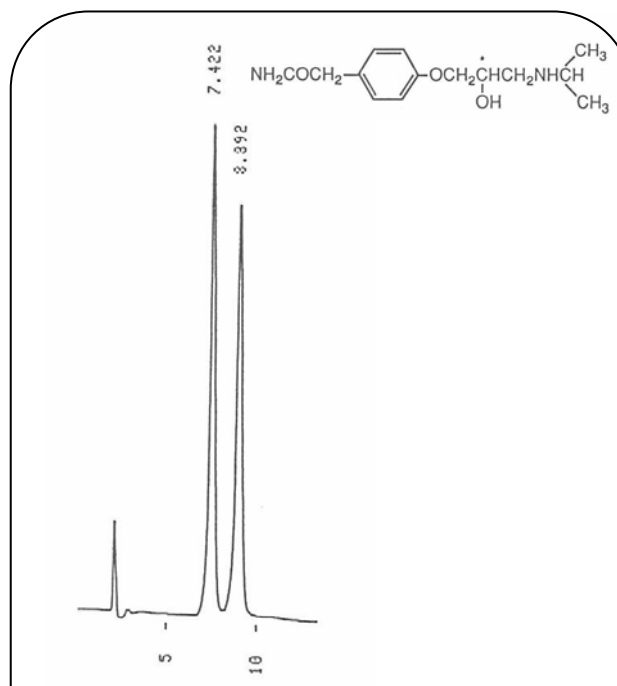
β -Blockers

Alprenolol



Column: ULTRON ES-PEPSIN
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.0) / C₂H₅OH = 95 / 5
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

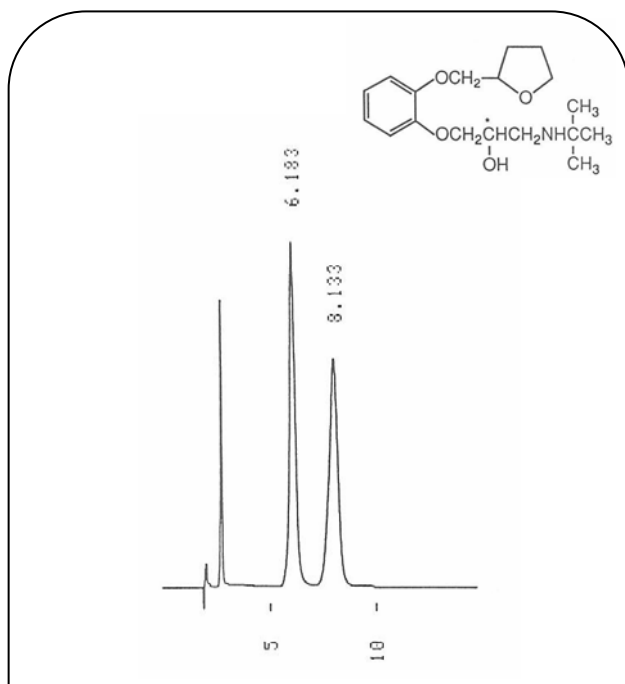
Atenolol



Column: ULTRON ES-PEPSIN
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 6.0) / C₂H₅OH = 99 / 1
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

β -Blockers

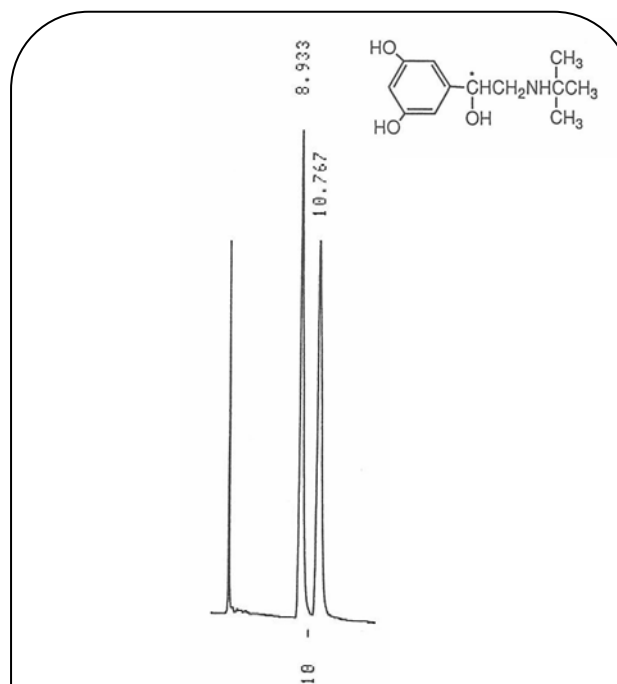
Bunitrolol



Column: ULTRON ES-PEPSIN
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.0) / C₂H₅OH = 95 / 5
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Bronchodilators

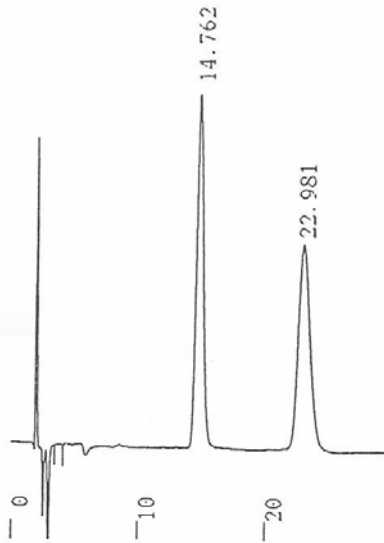
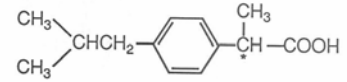
Terbutaline



Column: ULTRON ES-PEPSIN
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 6.0)
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Antiinflammatoryes

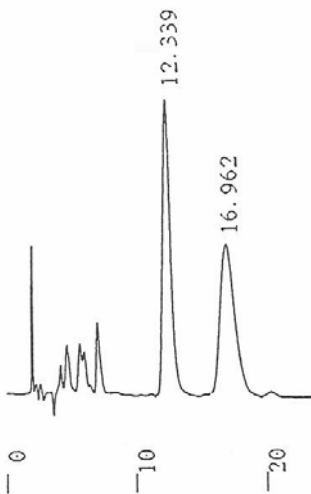
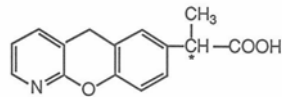
Ibuprofen



Column: ULTRON ES-BSA
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 7.0) / 1-Propanol / Caprylic Acid = 98 / 2 / 0.08
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Antiinflammatoryes

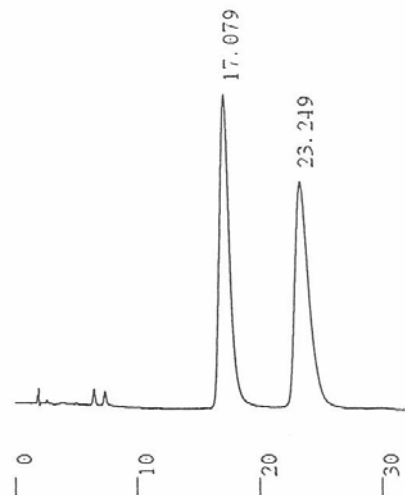
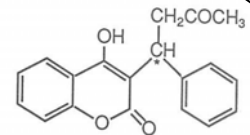
Pranoprofen



Column: ULTRON ES-BSA
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 7.0) / 1-Propanol / Caprylic Acid = 98 / 2 / 0.01
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Oral Anticoagulants

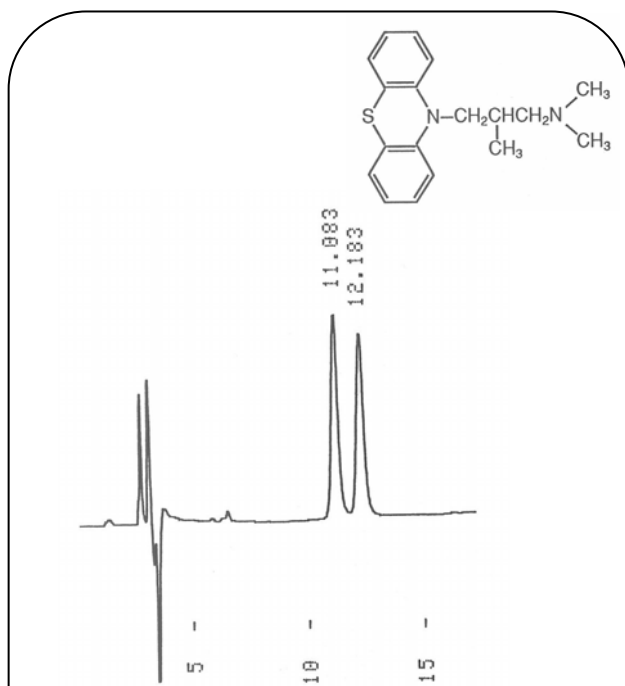
Warfarin



Column: ULTRON ES-BSA
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 7.0) / 1-Propanol / Caprylic Acid = 98 / 2 / 0.01
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

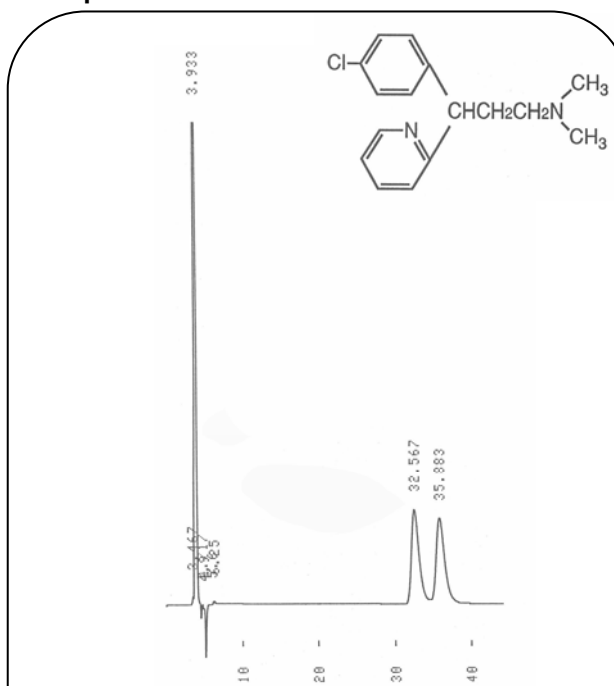
Antihistamines

Alimemazine



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 5.0) / CH₃CN = 70 / 30
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

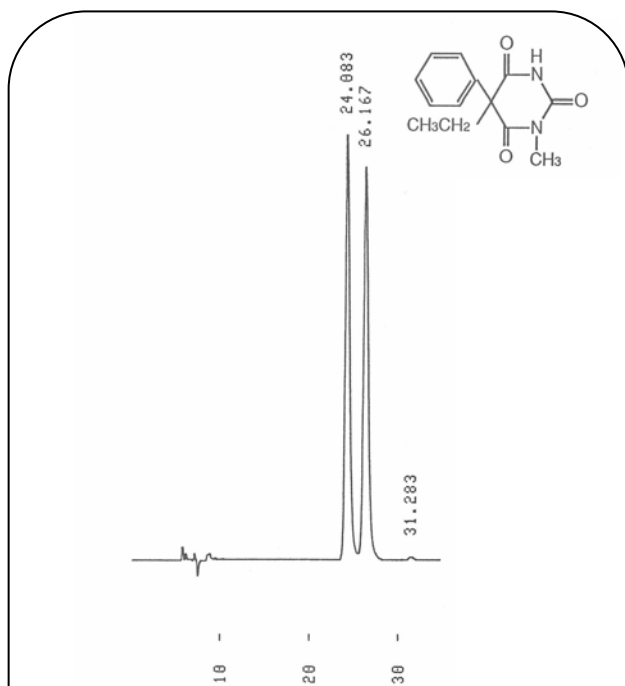
Chlorpheniramine



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 83 / 17
 Flow Rate: 1.0 mL/min
 Temperature: 15 °C
 Detection: UV-220 nm

Anticonvulsants

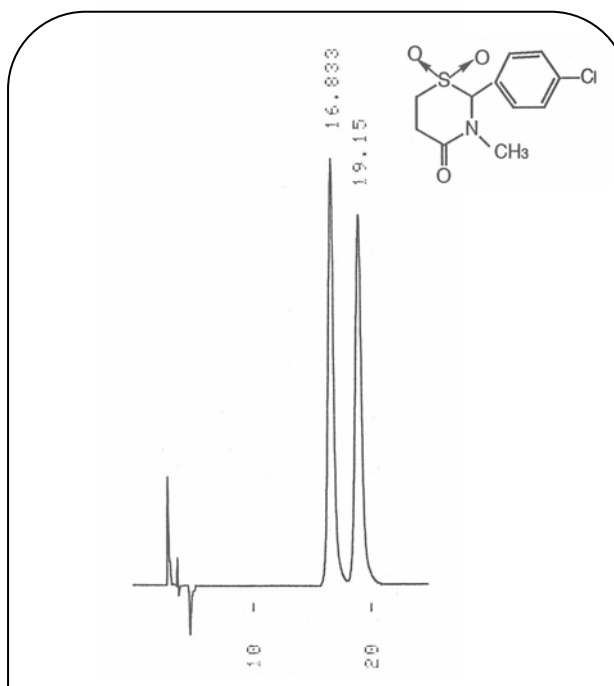
Mephobarbital



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 80 / 20
 Flow Rate: 0.6 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Skeletal Muscle Relaxants

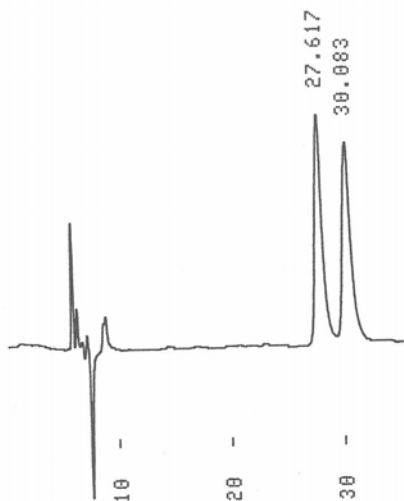
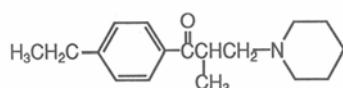
Chlormezanone



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 93 / 7
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

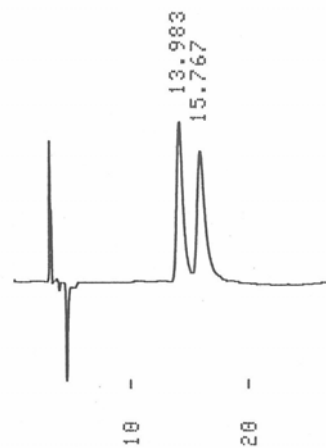
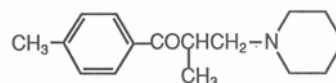
Skeletal Muscle Relaxants

Eperisone



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 80 / 20
 Flow Rate: 0.6 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

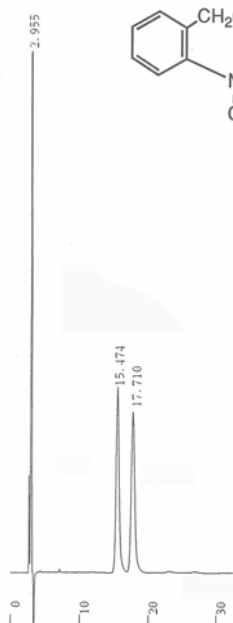
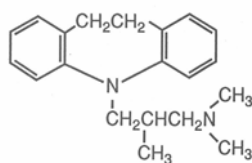
Tolperisone



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 85 / 15
 Flow Rate: 1.2 mL/min
 Temperature: 7 °C
 Detection: UV-220 nm

Antidepressants

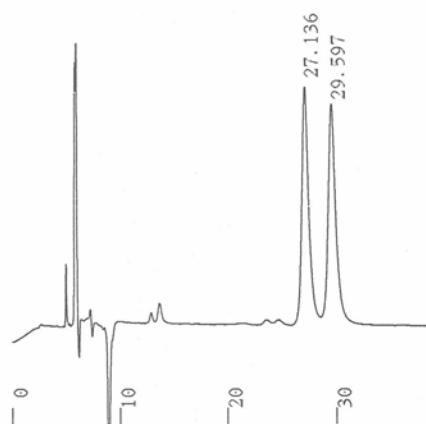
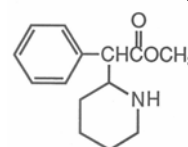
Trimipramine Maleate



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 75 / 25
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Central Nervous System Stimulants

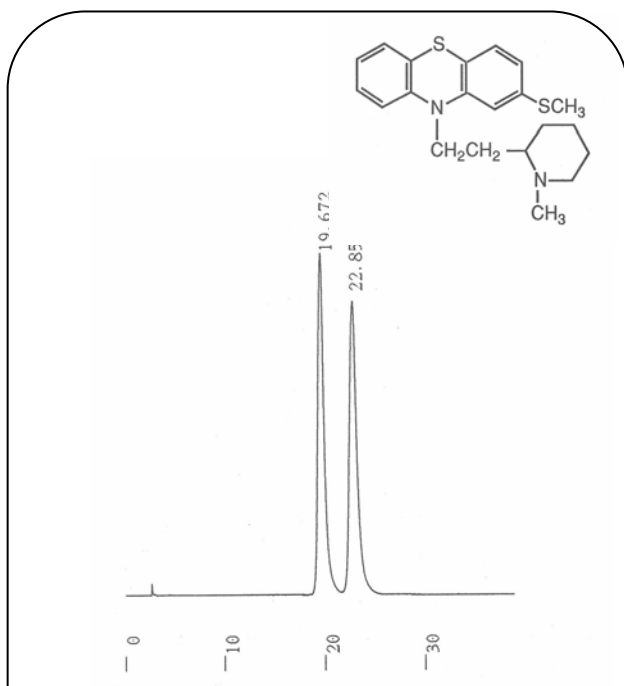
Methylphenidate



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 6.0) / CH₃CN = 90 / 10
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Antipsychotic Drug

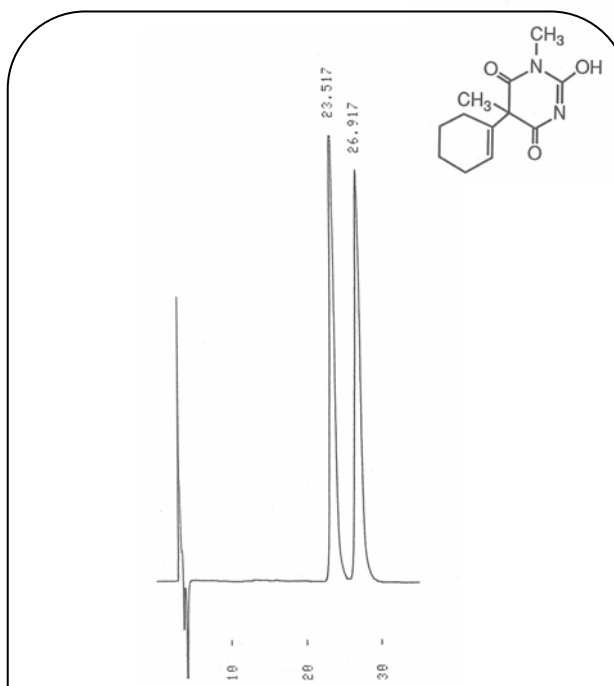
Thioridazine



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 75 / 25
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Hypnotics

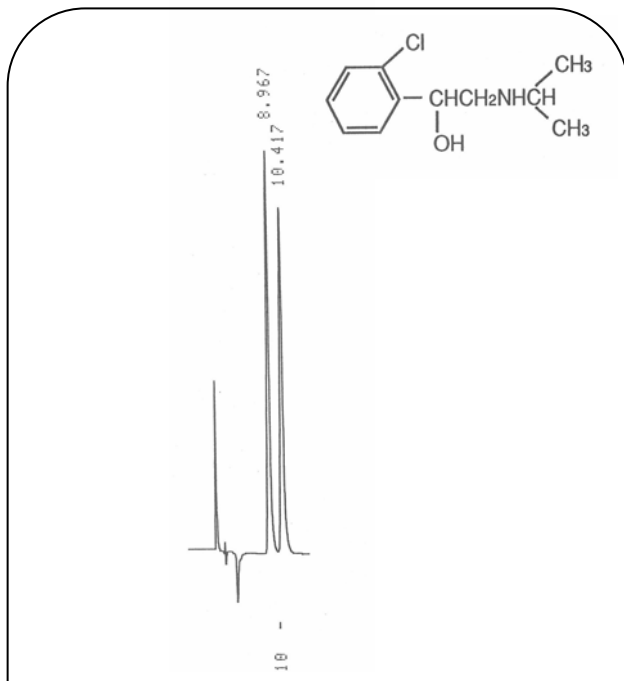
Hexobarbital



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 83 / 17
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

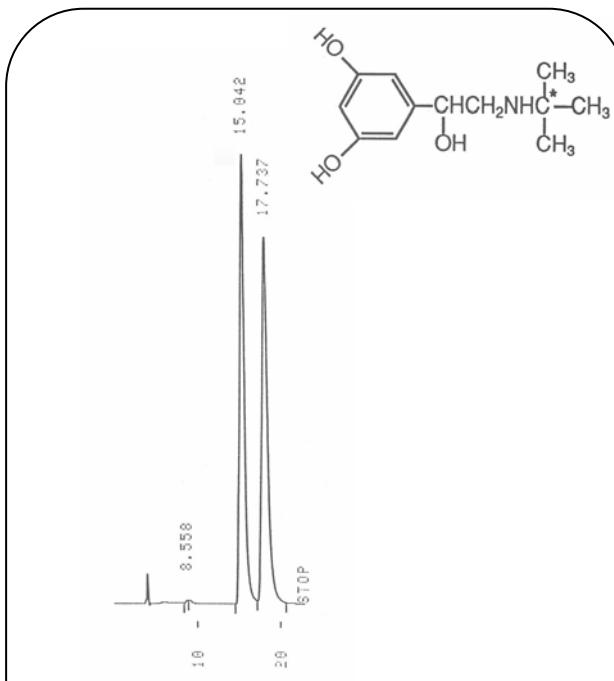
Bronchodilators

Clorprenaline



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 94 / 6
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

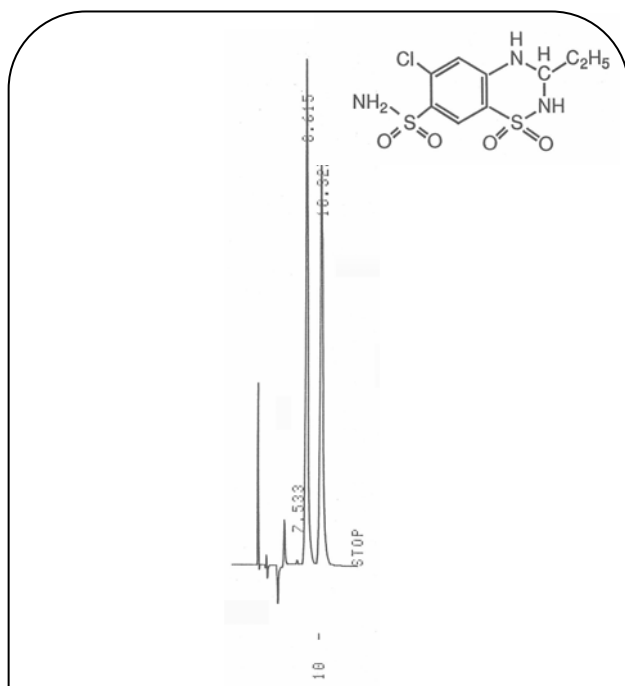
Terbutaline



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 6.0) / CH₃CN = 99 / 1
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Diuretics

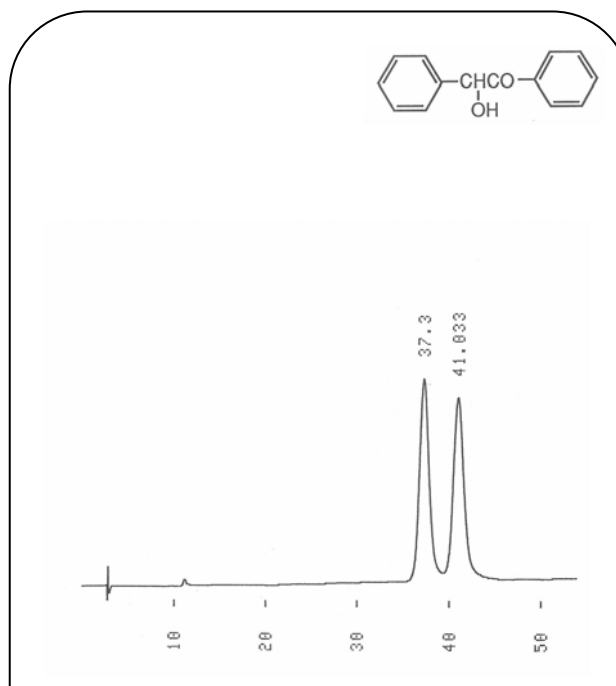
Ethiazide



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 92.5 / 7.5
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Others

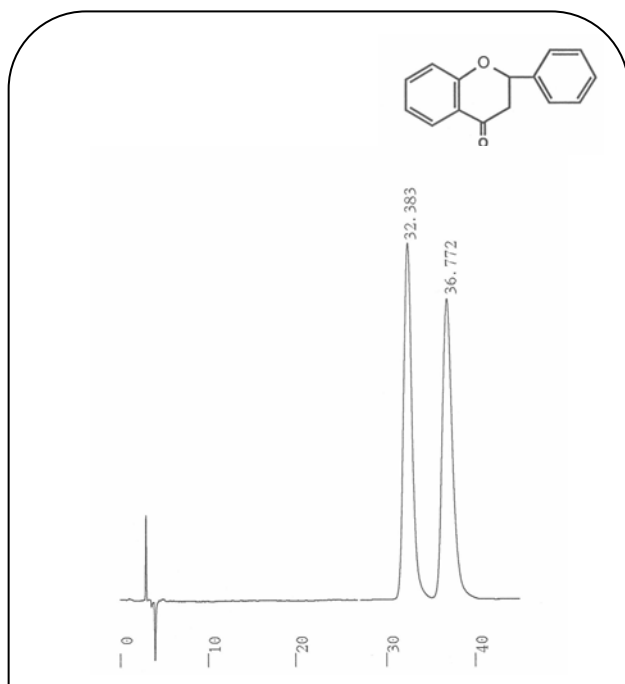
Benzoin



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 88 / 12
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

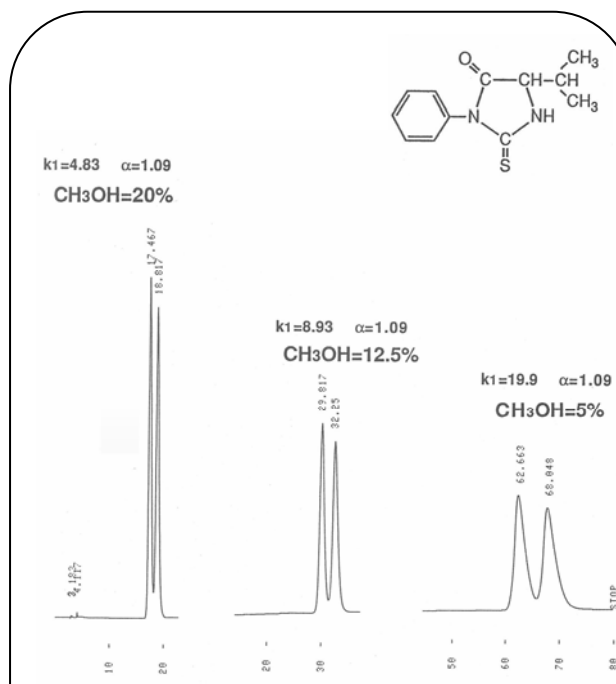
Others

Flavanone



Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 80 / 20
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

PTH-Valine



k₁=4.83 α=1.09
 CH₃OH=20%

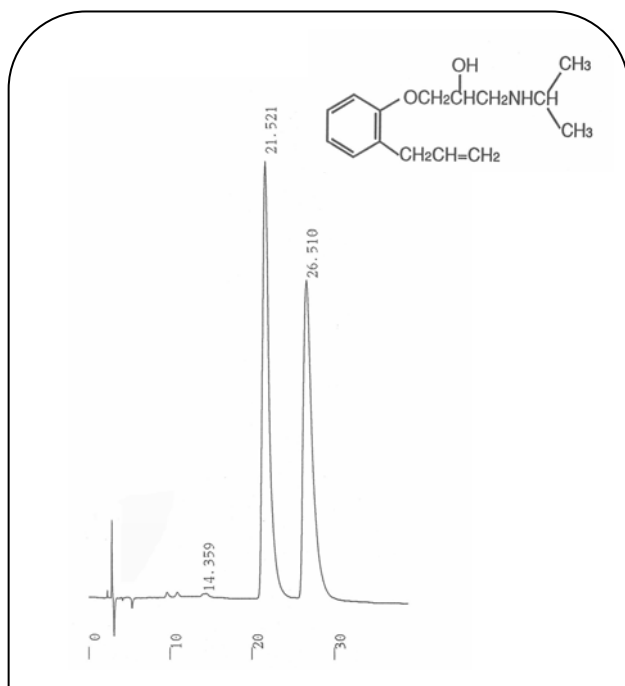
k₁=8.93 α=1.09
 CH₃OH=12.5%

k₁=19.9 α=1.09
 CH₃OH=5%

Column: ULTRON ES-CD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 3.0) / CH₃CN
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

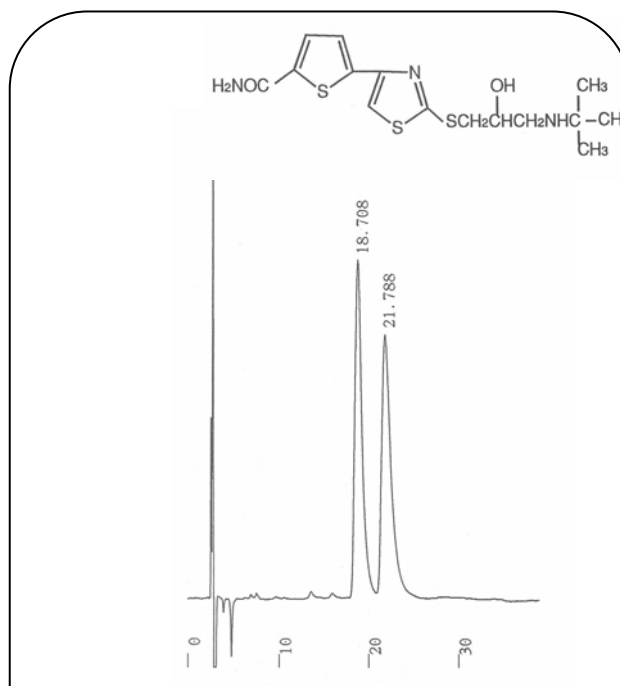
β -Blockers

Alprenolol



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 80 / 20
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

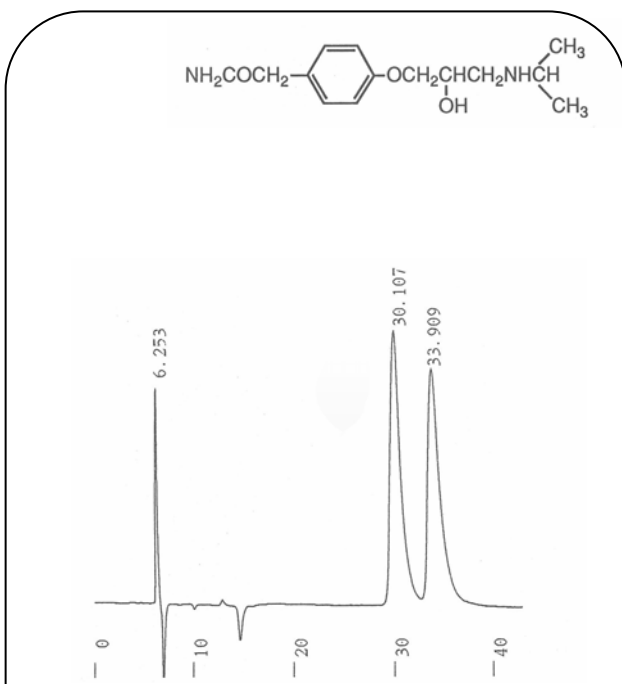
Arotinolol



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 75 / 25
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

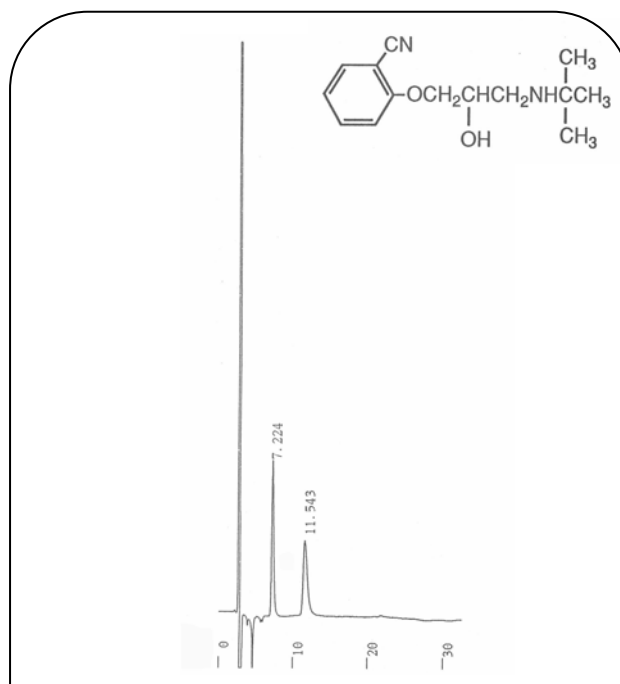
β -Blockers

Atenolol



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 6.0) / CH₃CN = 90 / 10
 Flow Rate: 0.6 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

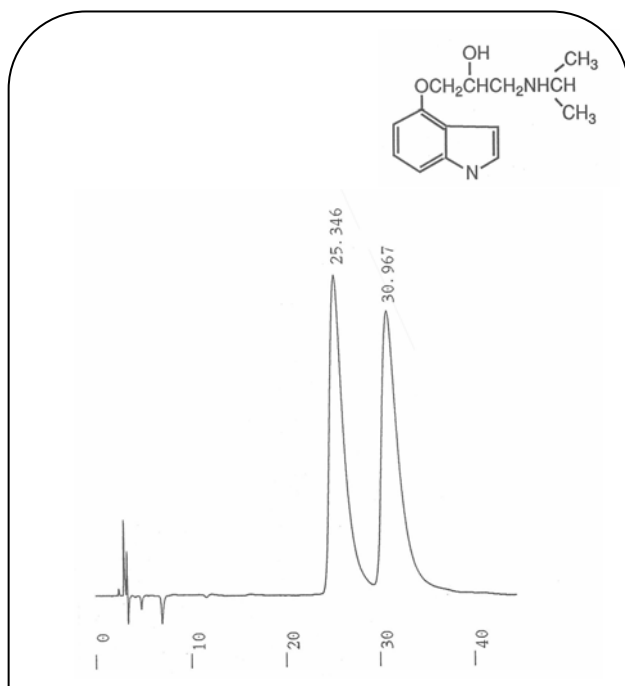
Bunitrolol



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 70 / 30
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

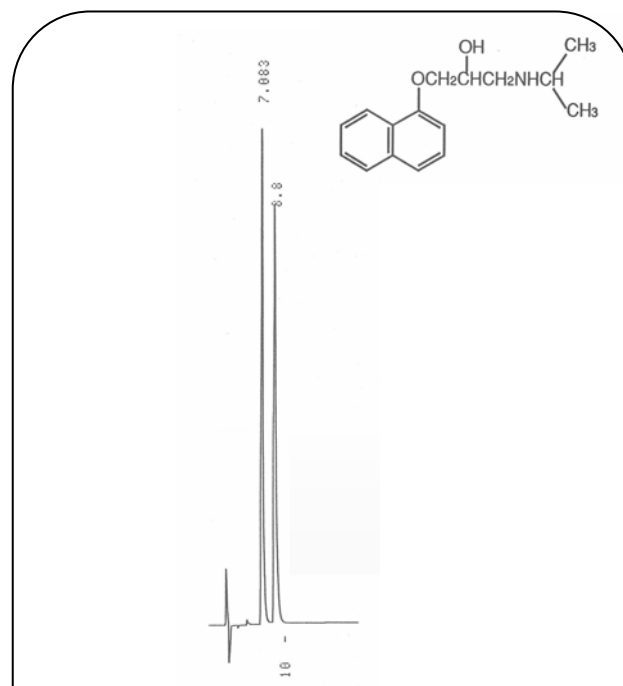
β -Blockers

Pindolol



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 90 / 10
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

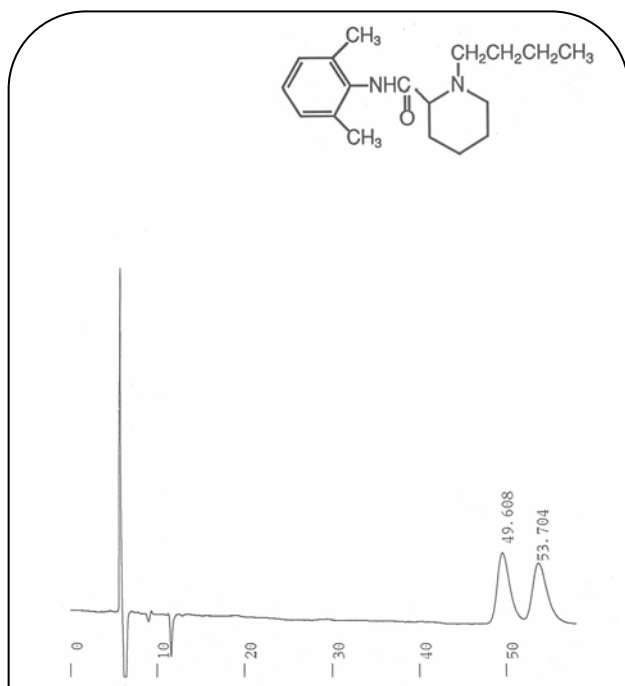
Propranolol



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 60 / 40
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Local Anesthetics

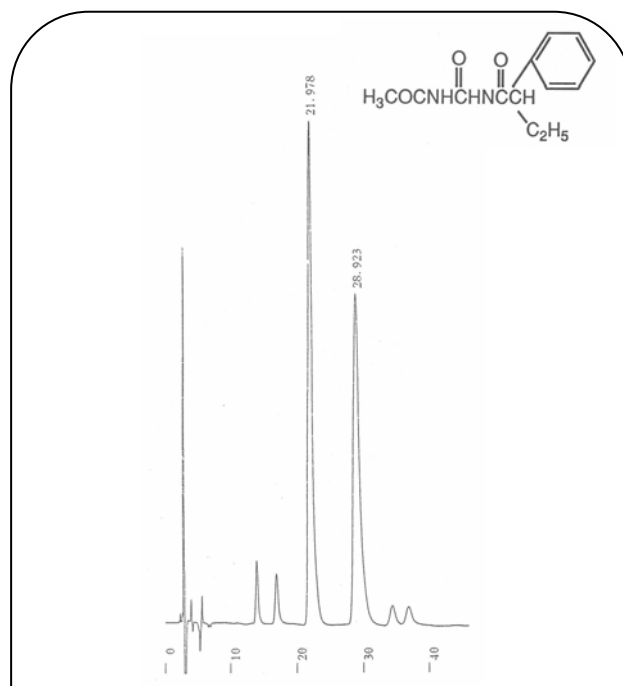
Bupivacaine



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 80 / 20
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

Anticonvulsants

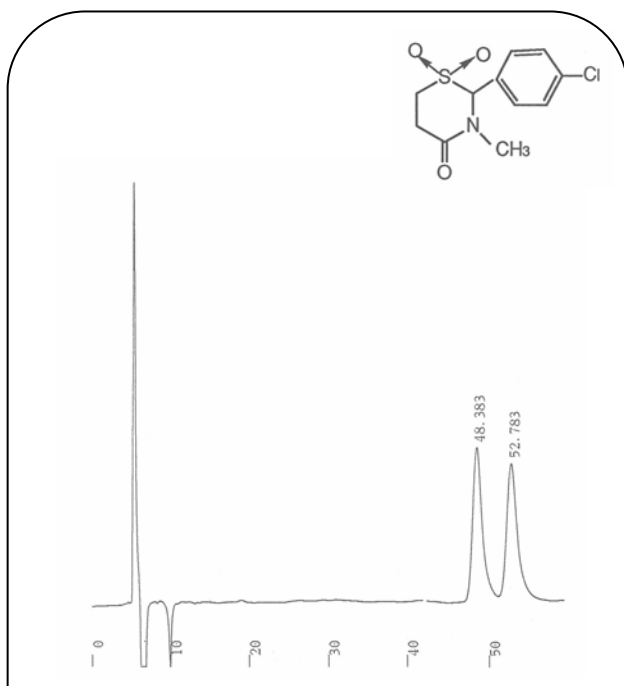
Acetylpheneturide



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 76 / 24
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-220 nm

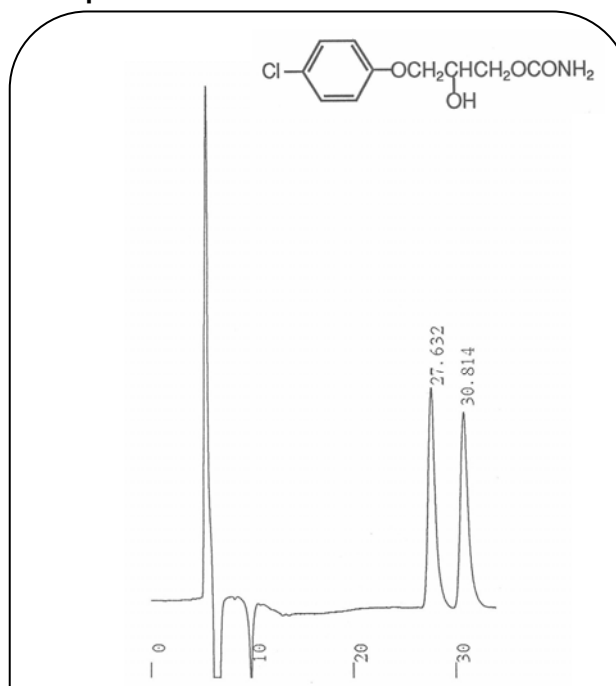
Skeletal Muscle Relaxants

Chlormezanone



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 70 / 30
 Flow Rate: 0.6 mL/min
 Temperature: 9 °C
 Detection: UV-220 nm

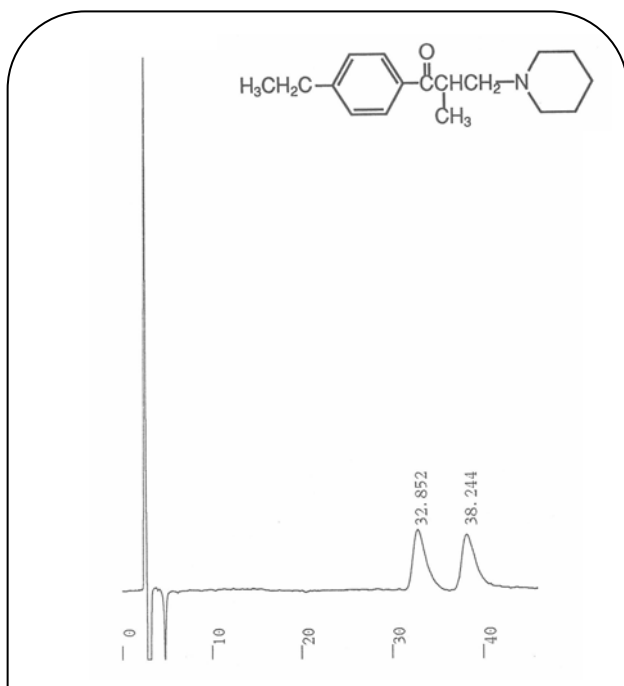
Chlorphenesin



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 70 / 30
 Flow Rate: 0.6 mL/min
 Temperature: 9 °C
 Detection: UV-220 nm

Skeletal Muscle Relaxants

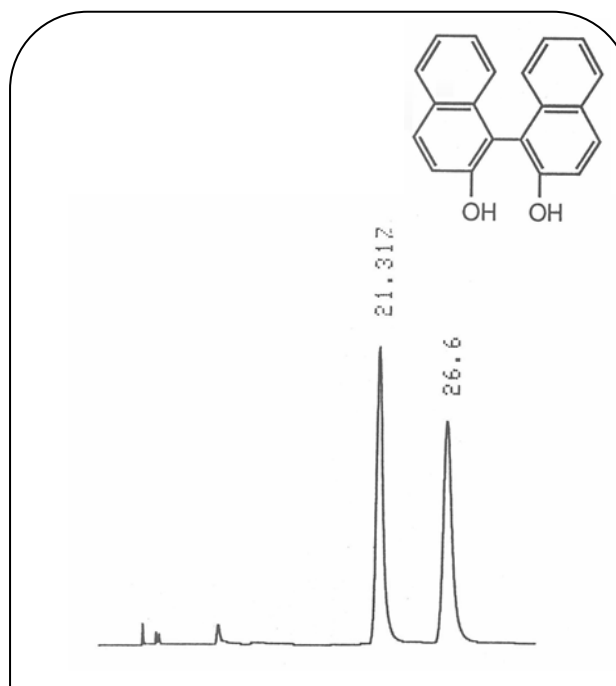
Eperisone



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH₂PO₄ (pH 4.6) / CH₃CN = 70 / 30
 Flow Rate: 1.2 mL/min
 Temperature: 9 °C
 Detection: UV-220 nm

Others

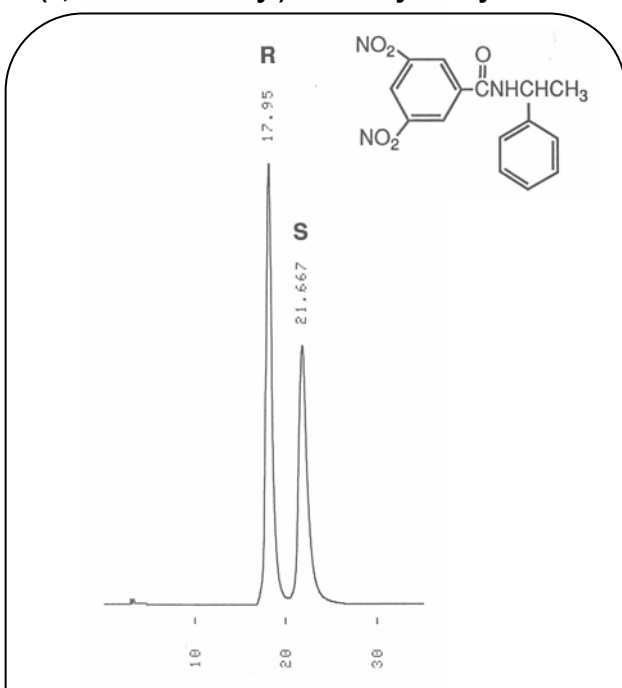
1,1'-Bi-2-naphthol



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: Hexane / Dichloromethane/ Methanol = 75 / 25 / 5
 Flow Rate: 1.2 mL/min
 Temperature: 25 °C
 Detection: UV-254 nm

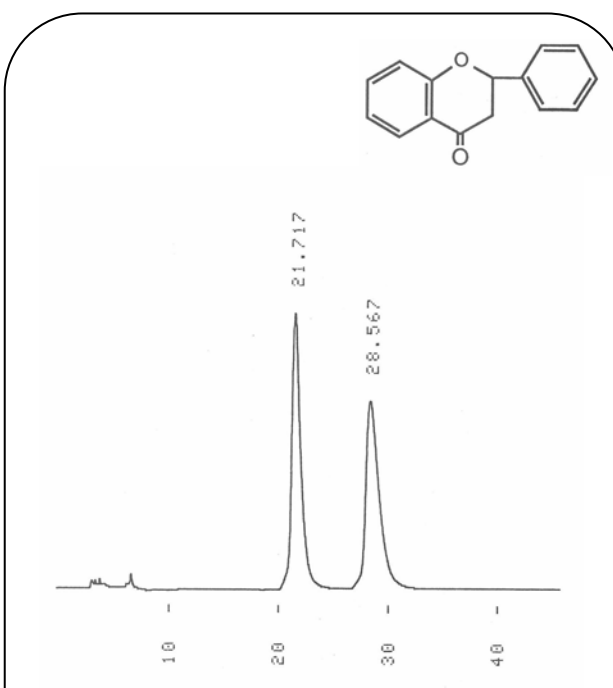
Others

N-(3,5-Dinitrobenzoyl)- α -methylbenzylamine



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: Hexane / Ethanol = 85 / 15
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-254 nm

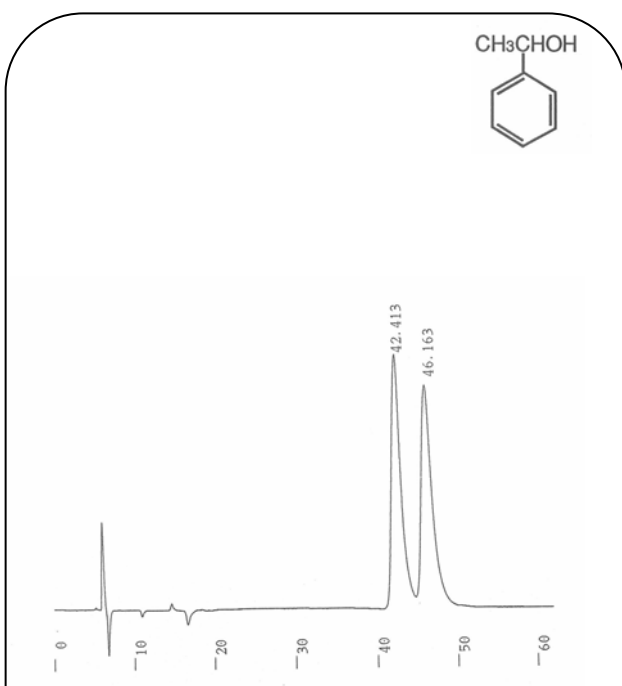
Flavanone



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: Hexane / Ethanol = 99 / 1
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-254 nm

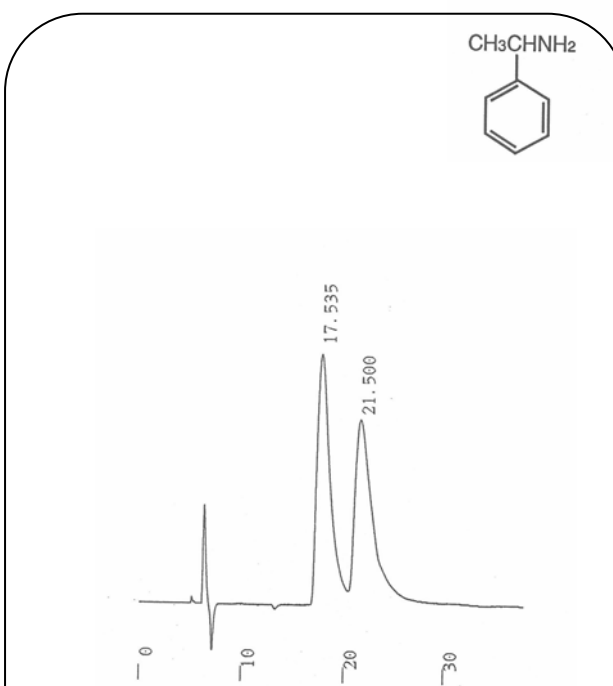
Others

α -Phenylethyl Alcohol



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH_2PO_4 (pH 4.6) / CH_3CN = 90 / 10
 Flow Rate: 0.6 mL/min
 Temperature: 15 °C
 Detection: UV-220 nm

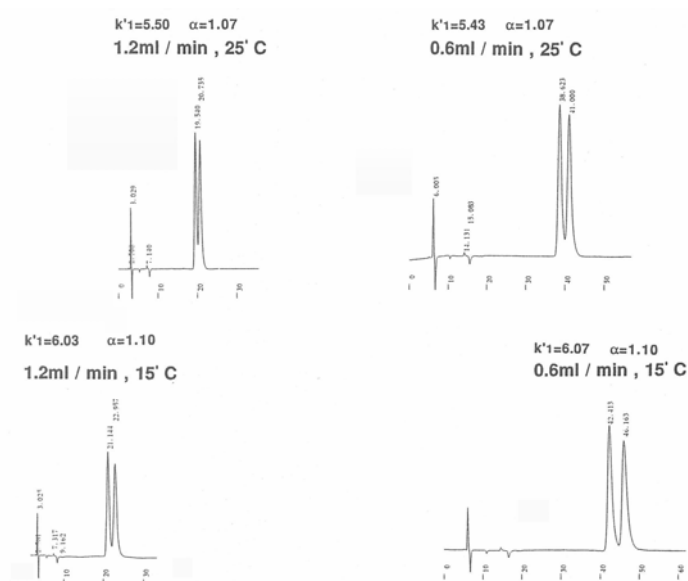
α -Phenylethylamine



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH_2PO_4 (pH 4.6) / CH_3CN = 95 / 5
 Flow Rate: 0.6 mL/min
 Temperature: 15 °C
 Detection: UV-220 nm

Others

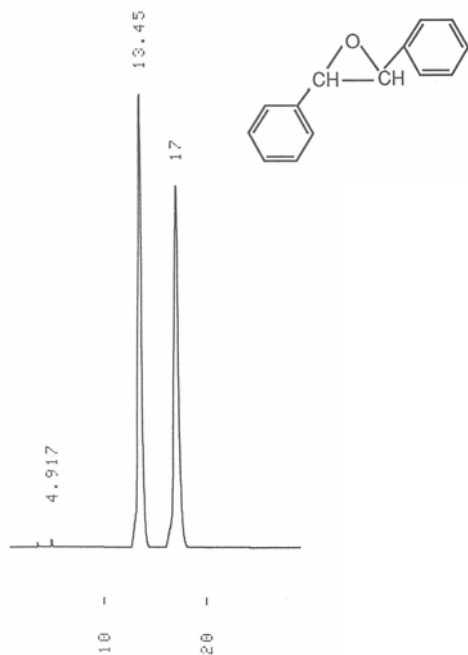
The Relationship Between Flow Ratio and Capacitor Ratio (k') of Column Temperature, Optics Recognition Ability (α)
 α -Phenylethylamine



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: 20 mM KH_2PO_4 (pH 4.6) / CH_3CN = 90 / 10
 Detection: UV-220 nm

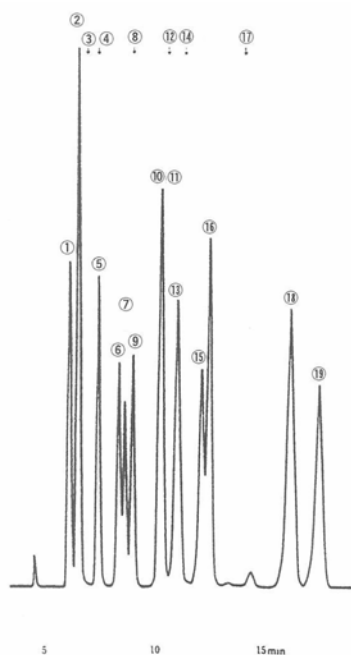
Others

trans-Stilbene Oxide



Column: ULTRON ES-PhCD
 Size: 150 mm x 6.0 mm I.D.
 Mobile Phase: Hexane / Methanol = 99.9 / 0.1
 Flow Rate: 1.0 mL/min
 Temperature: 25 °C
 Detection: UV-254 nm

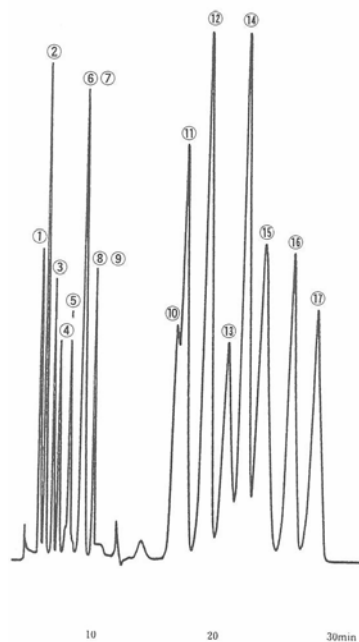
Elution Position of The Aliphatic Organic Acid



- ① Citric Acid
- ② Tartaric Acid
- ③ Glyoxylic Acid
- ④ Malic Acid
- ⑤ Malonic Acid
- ⑥ Succinic Acid
- ⑦ Glycolic Acid
- ⑧ Formic Acid
- ⑨ Lactic Acid
- ⑩ Acetic Acid
- ⑪ Fumaric Acid
- ⑫ Levulinic Acid
- ⑬ Adipic Acid
- ⑭ Pyroglutamic Acid
- ⑮ Propionic Acid
- ⑯ Acrylic Acid
- ⑰ Pivalic Acid
- ⑱ Methacrylic Acid
- ⑲ Crotonic Acid

Column: ULTRON PS-80H
 Size: 300 mm x 8.0 mm I.D.
 Mobile Phase: HClO₄aq. (pH2.1)
 Flow Rate: 1.0 mL/min
 Temperature: 60 °C
 Detection: UV-210 nm

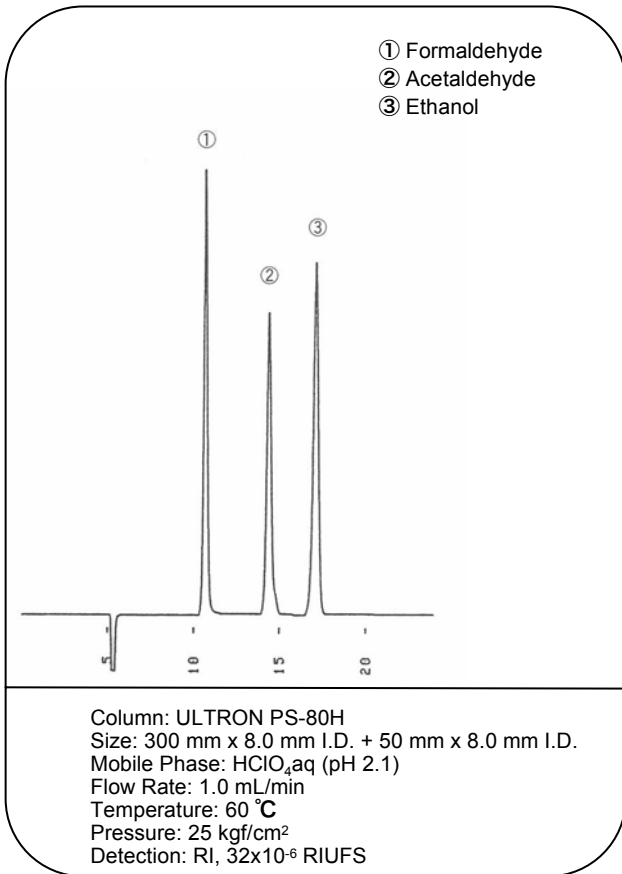
Elution Position of The Aromatic Organic Acid



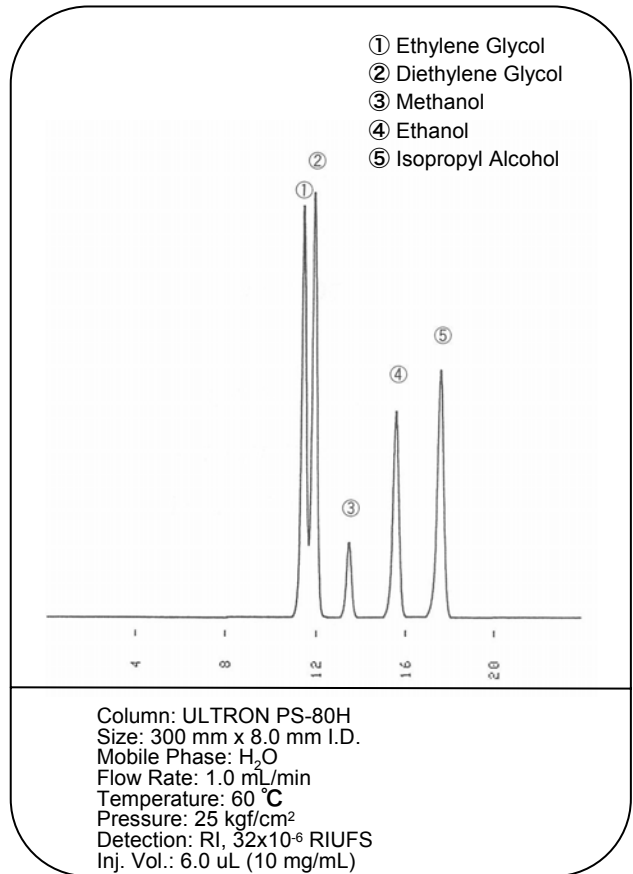
- ① Citric Acid
- ② Tartaric Acid
- ③ Malonic Acid
- ④ Succinic Acid
- ⑤ Lactic Acid
- ⑥ Acetic Acid
- ⑦ Gallic Acid
- ⑧ Propionic Acid
- ⑨ o-Phthalic Acid
- ⑩ Phenoxyacetic Acid
- ⑪ m-Hydroxybenzoic Acid
- ⑫ p-Hydroxybenzoic Acid
- ⑬ Vanilic Acid
- ⑭ Sorbic Acid
- ⑮ Caffeic Acid
- ⑯ Benzoic Acid
- ⑰ o-Hydroxybenzoic Acid

Column: ULTRON PS-80H
 Size: 300 mm x 8.0 mm I.D.
 Mobile Phase: 10 % CH₃CN Addition HClO₄aq. (pH2.1)
 Flow Rate: 1.0 mL/min
 Temperature: 60 °C
 Detection: UV-210 nm

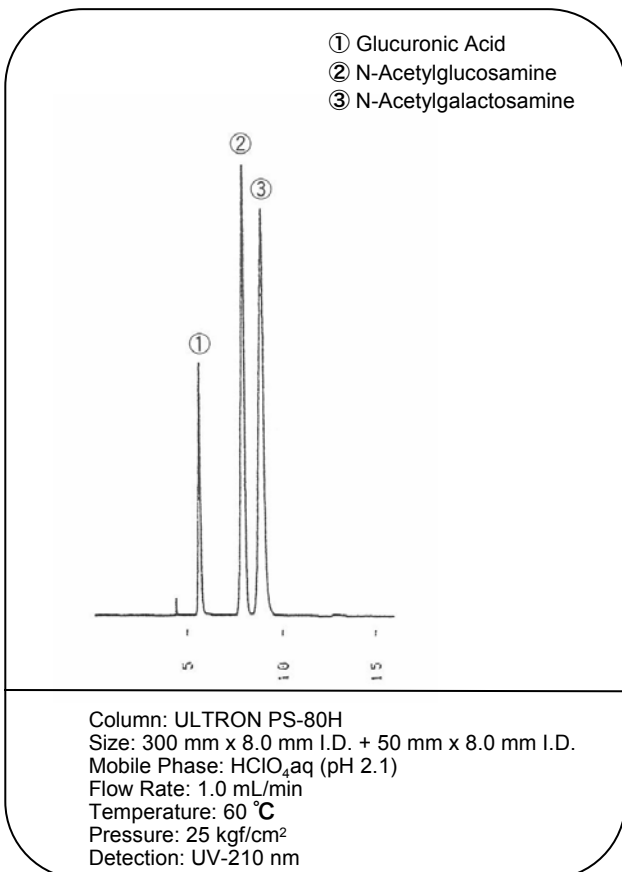
Alcohols Aldehydes



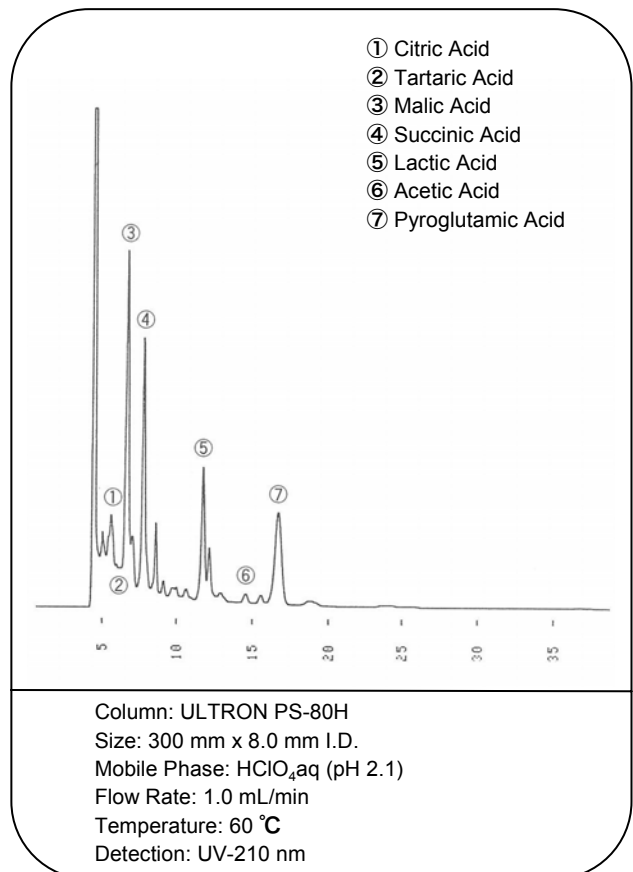
Alcohols



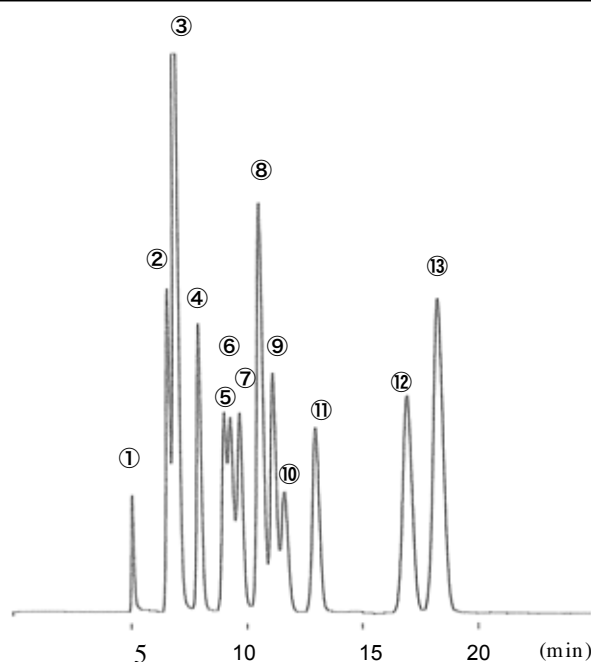
Uronic Acid, Acetylation Amino Sugar



Analysis of The Soy Sauce



Analysis of Aliphatic Organic Acid

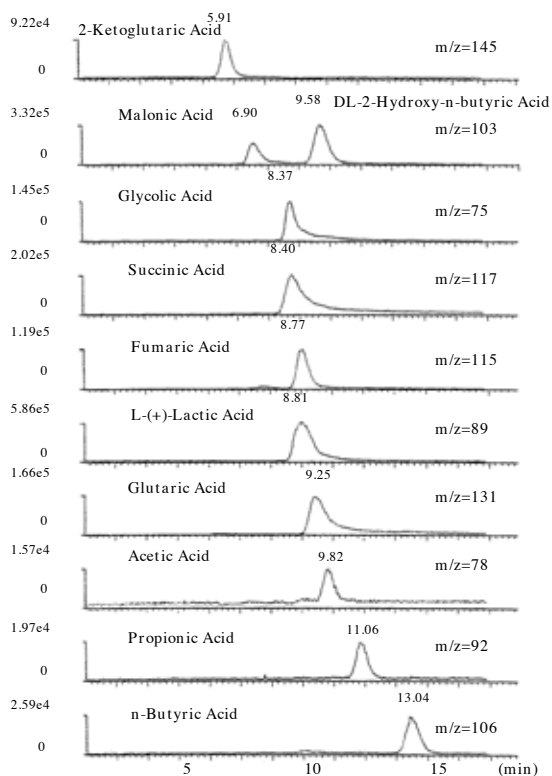


- ① Citric Acid
- ② Tartaric Acid
- ③ Maleic Acid
- ④ Malonic Acid
- ⑤ Succinic Acid
- ⑥ Glycolic Acid
- ⑦ Lactic Acid
- ⑧ Fumaric Acid
- ⑨ Acetic Acid
- ⑩ Adipic Acid
- ⑪ Propionic Acid
- ⑫ Methacrylic Acid
- ⑬ Crotonic Acid

Column: ULTRON PS-80H
 Size: 250 mm x 2.0 mm I.D.
 Mobile Phase: HClO₄aq (pH 2.1)
 Flow Rate: 0.05 mL/min

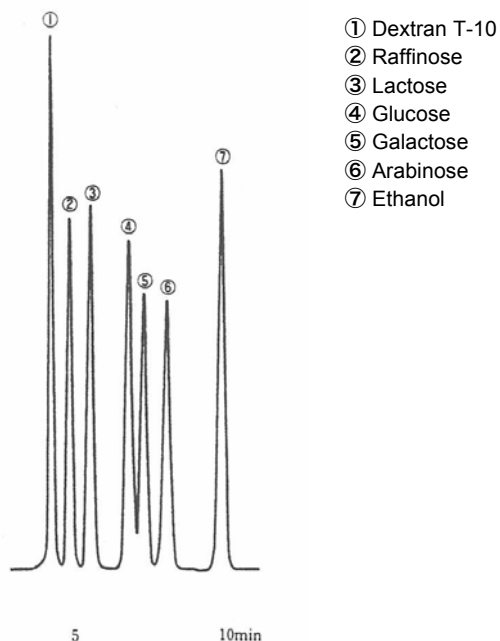
Temperature: 60 °C
 Press.: 0.7 MPa
 Injection Amount: 2.5 uL
 Detection: UV-210 nm

Mass Chromatograms Obtained by TIC of 11 Carboxylic Acids.



Column : ULTRON PS-80H
 Dimensions : 250 mm L × 2.0 mm I.D.
 Mobile Phase : 0.1% Formic Acid (pH 2.3)
 Flow Rate : 0.07 ml/min
 Temperature : 55°C
 Detection : ESI Positive and Negative, Range: m/z 50~350

Elution Position of Sugar and Sugar Alcohol for PS-80N

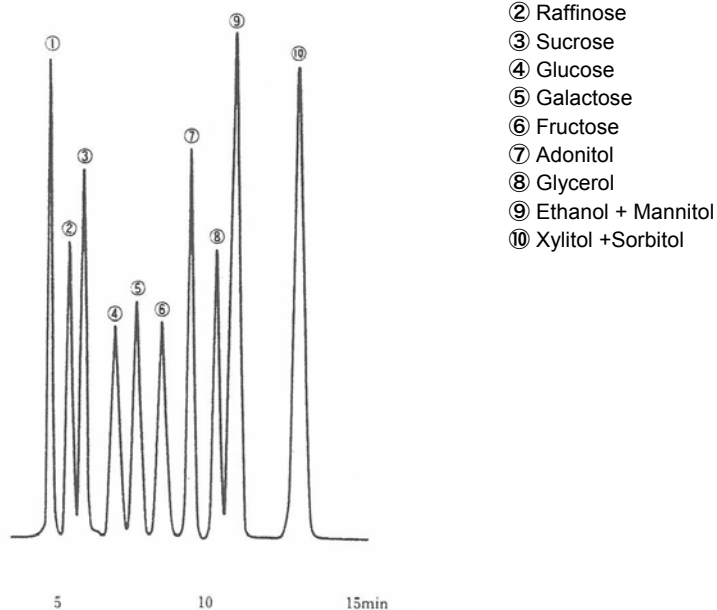


- ① Dextran T-10
- ② Raffinose
- ③ Lactose
- ④ Glucose
- ⑤ Galactose
- ⑥ Arabinose
- ⑦ Ethanol

Column: ULTRON PS-80N
 Size: 300 mm x 8.0 mm I.D.
 Mobile Phase: H₂O
 Flow Rate: 1.0 mL/min

Temperature: 60 °C
 Detection: RI, 16x10⁻⁶ RIUFS
 Sample: ea. 15 mg/mL, Ethanol 50 uL/mL

Elution Position of Sugar and Sugar Alcohol for PS-80C

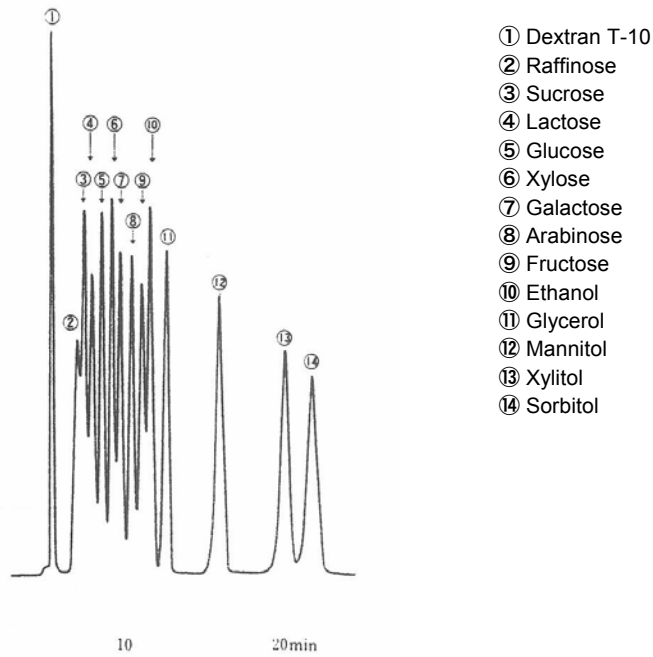


- ① Dextran T-10
- ② Raffinose
- ③ Sucrose
- ④ Glucose
- ⑤ Galactose
- ⑥ Fructose
- ⑦ Adonitol
- ⑧ Glycerol
- ⑨ Ethanol + Mannitol
- ⑩ Xylitol + Sorbitol

Column: ULTRON PS-80C
 Size: 300 mm x 8.0 mm I.D.
 Mobile Phase: H₂O
 Flow Rate: 1.0 mL/min

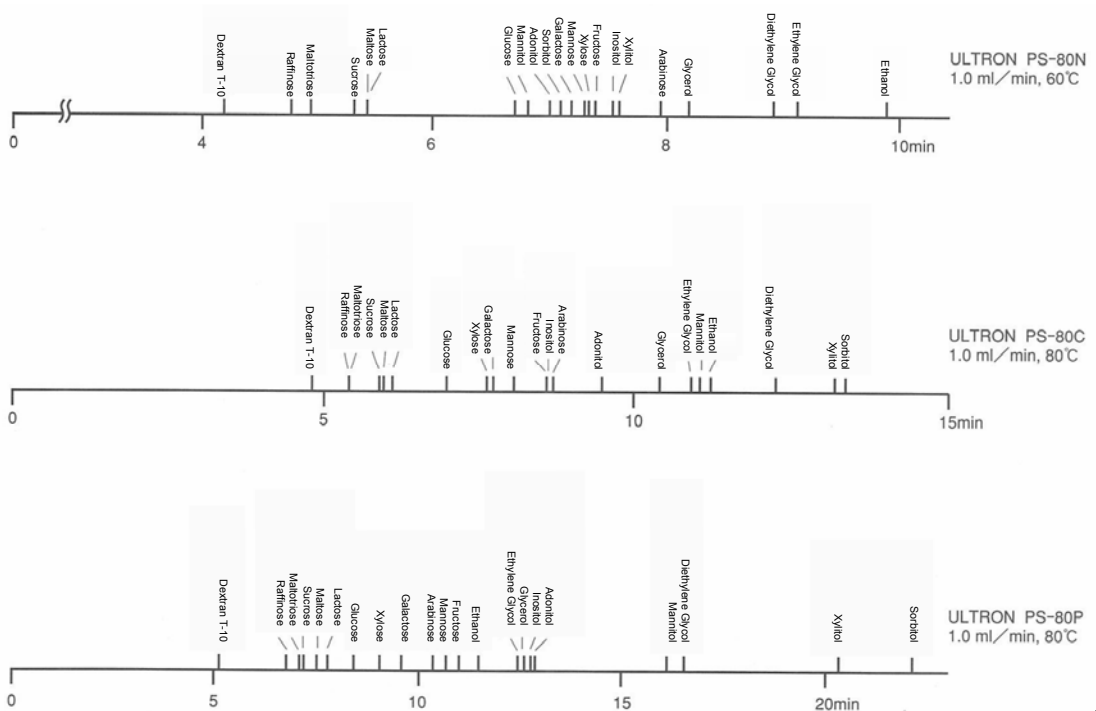
Temperature: 80 °C
 Detection: RI, 16x10⁻⁶ RIUFS
 Sample: ea. 10 uL/mL

Elution Position of Sugar and Sugar Alcohol for PS-80P

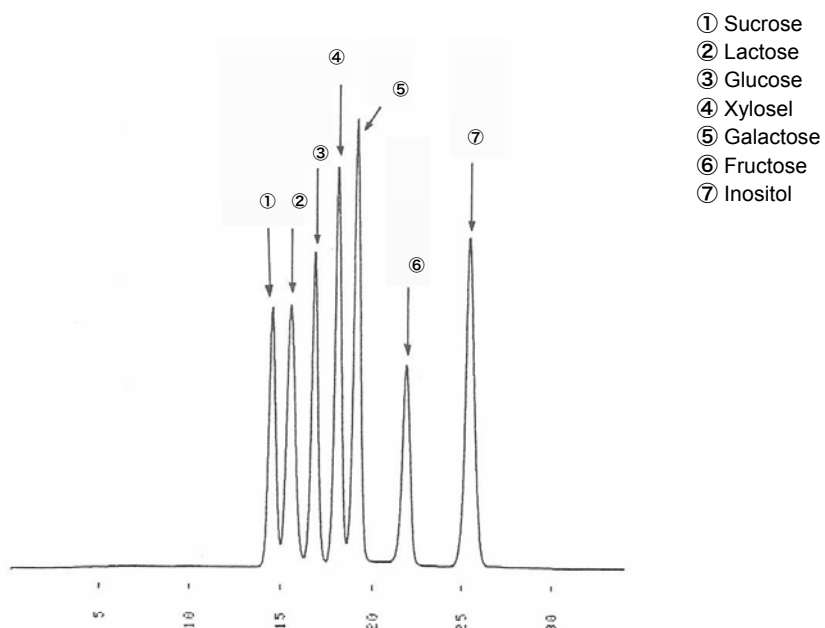


Column: ULTRON PS-80P Temperature: 80 °C
 Size: 300 mm x 8.0 mm I.D. Detection: RI, 16x10⁻⁵ RIUFS
 Mobile Phase: H₂O Sample: ea. 10 uL/mL
 Flow Rate: 1.0 mL/min

Retention Index of The Standard Sample



Sugar and Sugar Alcohol



Column: ULTRON PS-80P

Size: 300 mm x 8.0 mm I.D. + 300 mm x 8.0 mm I.D.

Mobile Phase: H₂O

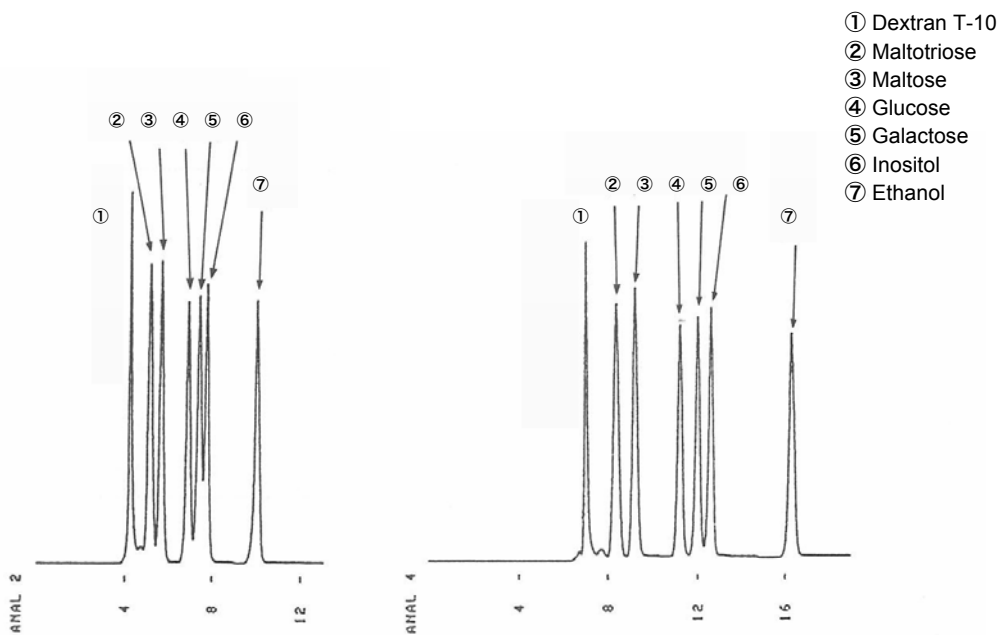
Flow Rate: 1.0 mL/min

Temperature: 80 °C

Pressure: 20 kgf/cm²

Detection: RI, 16x10⁻⁵ RIUFS

Comparison of Retention Between PS-80N 300 mm × 8.0 mm and 500 mm × 8.0 mm



Column: ULTRON PS-80N

Size: 300 mm x 8.0 mm I.D.

Mobile Phase: H₂O

Flow Rate: 1.0 mL/min

Pressure: 20 kgf/cm²

Column: ULTRON PS-80N•L

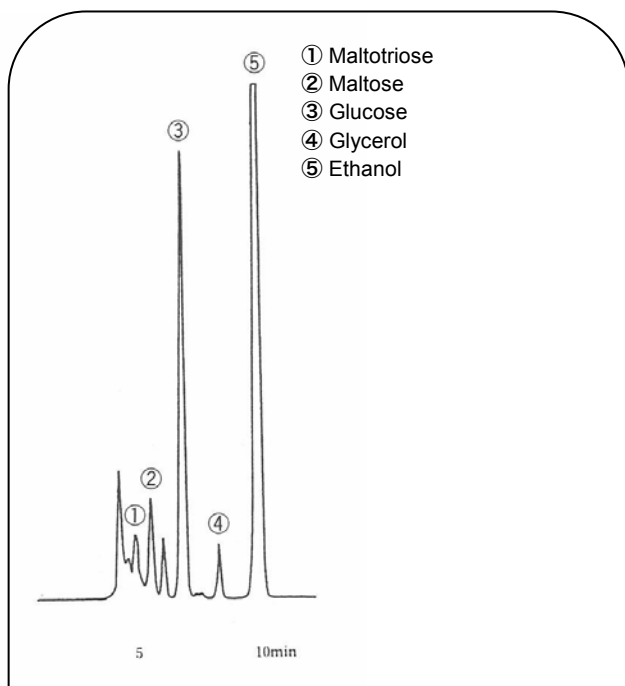
Size: 500 mm x 8.0 mm I.D.

Mobile Phase: H₂O

Flow Rate: 1.0 mL/min

Pressure: 35 kgf/cm²

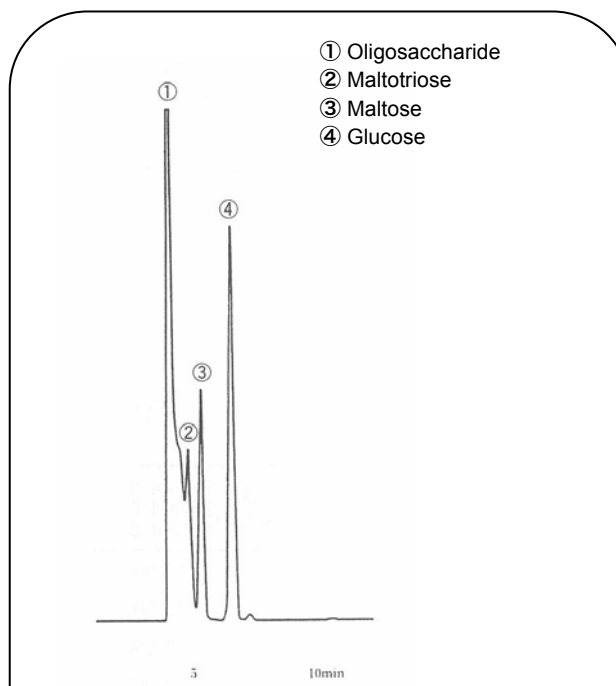
Sake



- ① Maltotriose
- ② Maltose
- ③ Glucose
- ④ Glycerol
- ⑤ Ethanol

Column: ULTRON PS-80N Temperature: 60 °C
 Size: 300 mm x 8.0 mm I.D. Pressure: 22 kgf/cm²
 Mobile Phase: H₂O Detection: RI, 16x10⁻⁵ RIUFS
 Flow Rate: 1.0 mL/min Injection Vol.: 10 uL

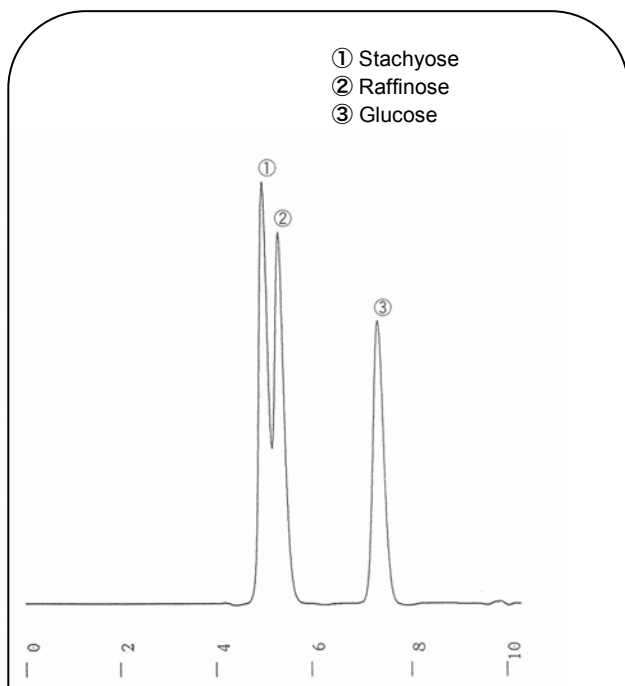
Starch Syrup



- ① Oligosaccharide
- ② Maltotriose
- ③ Maltose
- ④ Glucose

Column: ULTRON PS-80N Temperature: 60 °C
 Size: 300 mm x 8.0 mm I.D. Pressure: 22 kgf/cm²
 Mobile Phase: H₂O Detection: RI, 16x10⁻⁵ RIUFS
 Flow Rate: 1.0 mL/min Injection Vol.: 5 uL(25 mg/mL)

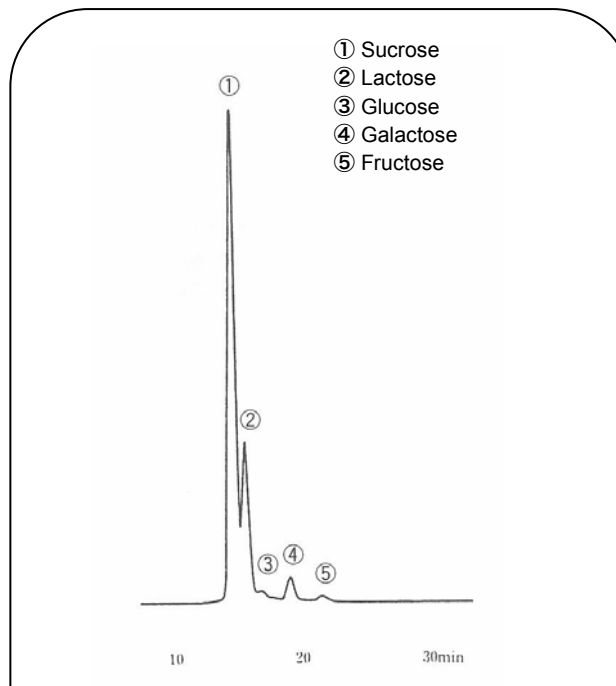
Separation of Stachyose and Raffinose



- ① Stachyose
- ② Raffinose
- ③ Glucose

Column: ULTRON PS-80N Temperature: 60 °C
 Size: 300 mm x 8.0 mm I.D. Pressure: 25 kgf/cm²
 Mobile Phase: H₂O Detection: RI, 128x10⁻⁶ RIUFS
 Flow Rate: 1.0 mL/min Injection Vol.: 10 uL(2 mg/mL)

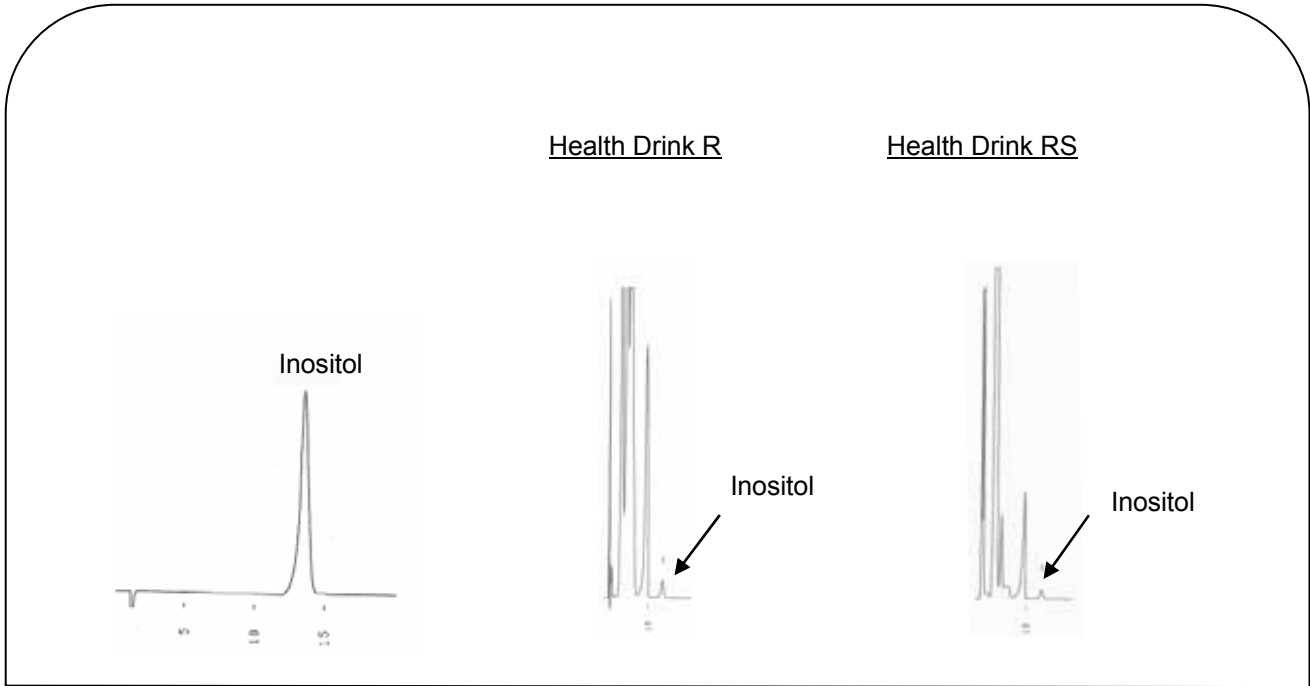
Yoghurt Drink



- ① Sucrose
- ② Lactose
- ③ Glucose
- ④ Galactose
- ⑤ Fructose

Column: ULTRON PS-80C Temperature: 80 °C
 Size: 300 mm x 8.0 mm I.D. Pressure: 20 kgf/cm²
 Mobile Phase: H₂O Detection: RI, 8x10⁻⁵ RIUFS
 Flow Rate: 0.5 mL/min Injection Vol.: 10 uL

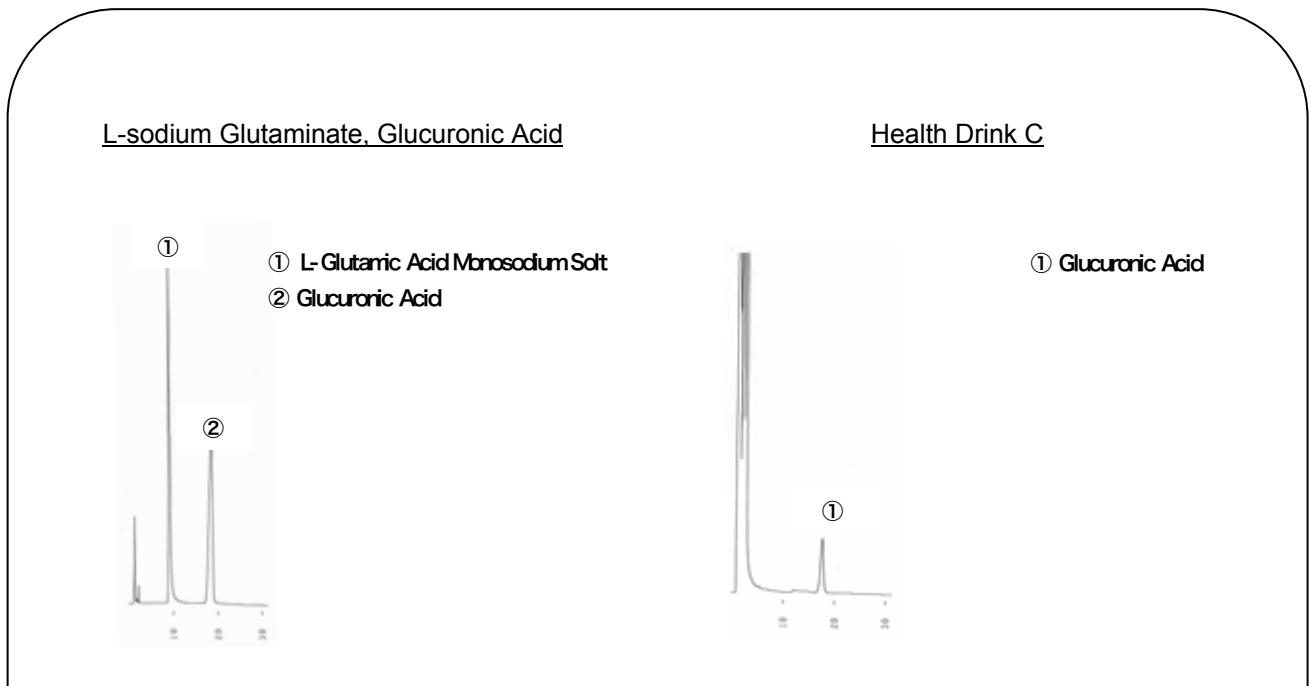
Inositol in Health Drink



Column: ULTRON CI
 Size: 200 mm x 4.6 mm I.D.
 Mobile Phase: CH₃CN / H₂O = 60 / 40

Flow Rate: 1.0 mL/min
 Temperature: 40 °C
 Detection: RI

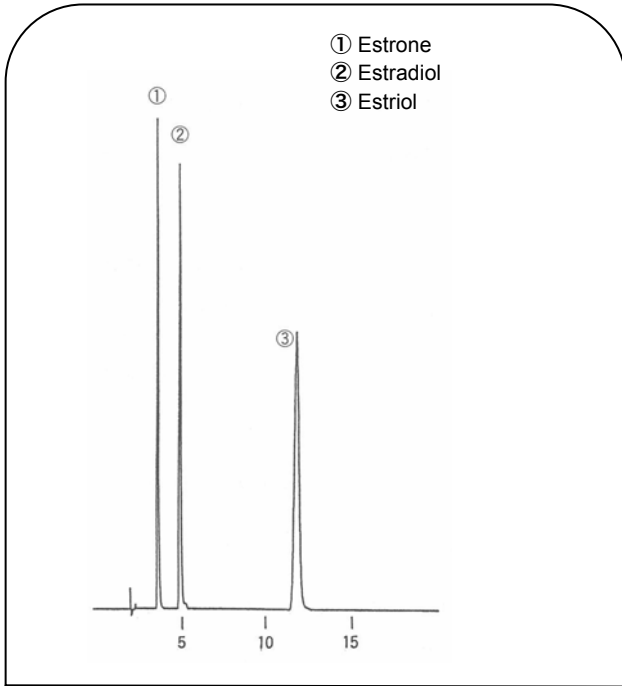
Glucuronic Acid in Health Drink



Column: ULTRON CL
 Size: 150 mm x 4.0 mm I.D.
 Mobile Phase: 20mMKH₂PO₄

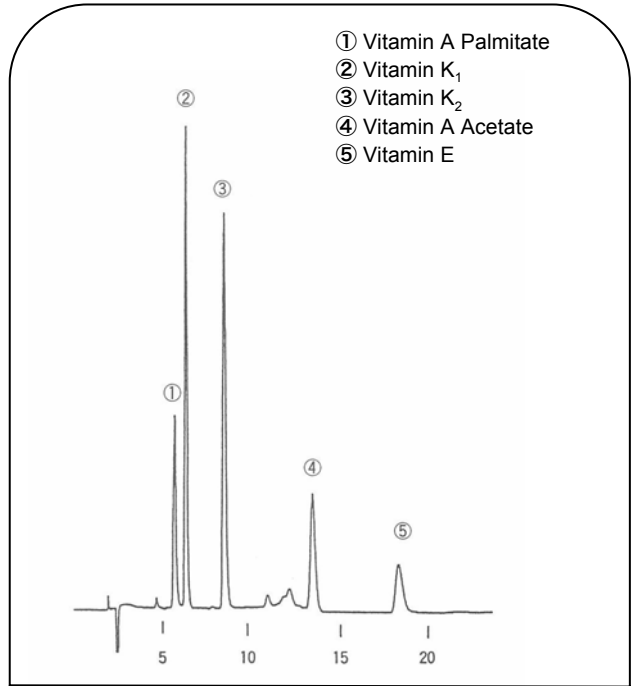
Flow Rate: 0.8 mL/min
 Temperature: 70 °C
 Detection: UV-210 nm

Female Sex Hormone



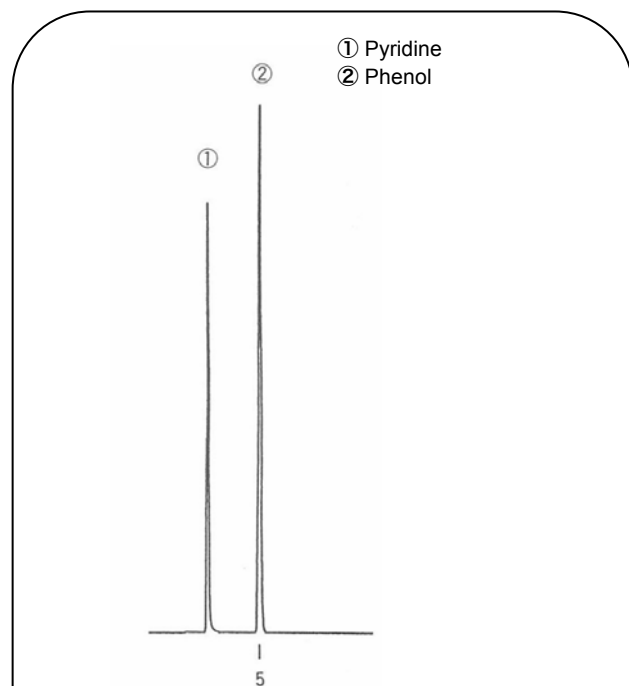
Column: ULTRON VX-SIL
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: n-Hexane / Ethanol = 90 / 10
 Flow Rate: 1.0 mL/min
 Temperature: Ambient
 Detection: UV-280 nm

The Fat-soluble Vitamins



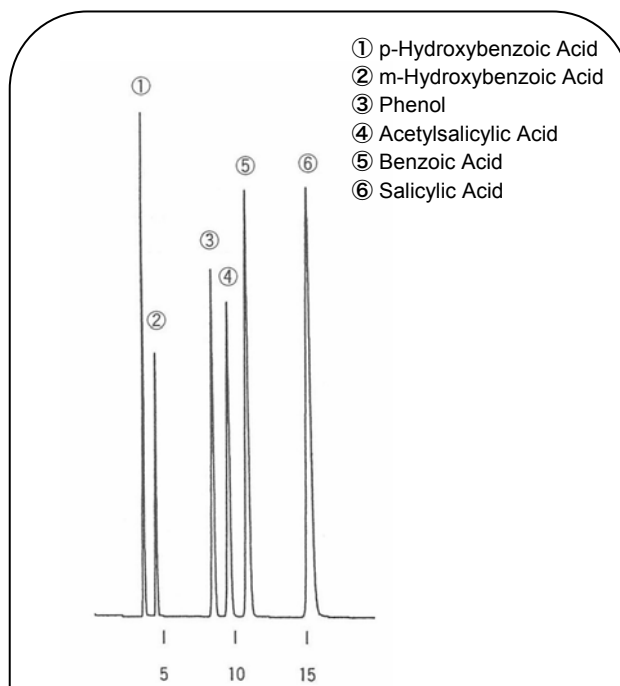
Column: ULTRON VX-SIL
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: n-Hexane / Dichloromethane = 90 / 10
 Flow Rate: 1.0 mL/min
 Temperature: Ambient
 Detection: UV-254 nm

Pyridine, Phenol Test



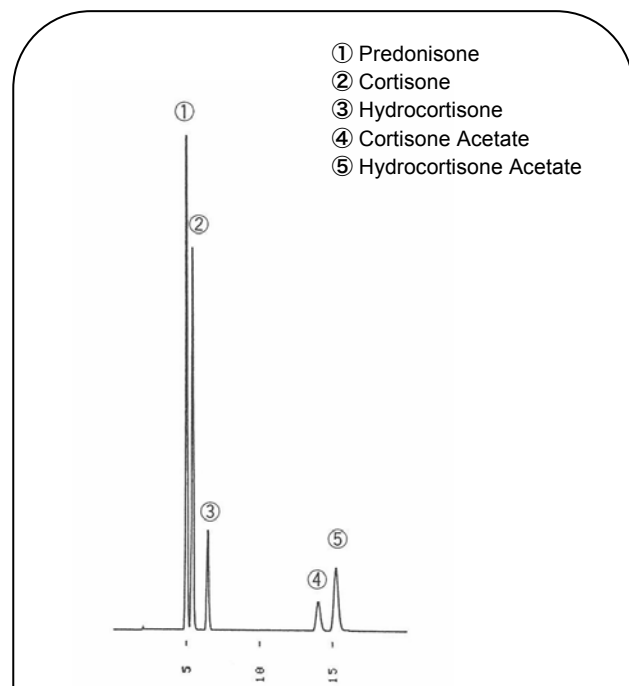
Column: ULTRON VX-ODS
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: CH₃CN / H₂O = 30 / 70
Flow Rate: 1.0 mL/min
Temperature: 30 °C
Detection: UV-254 nm

Acidic Compounds



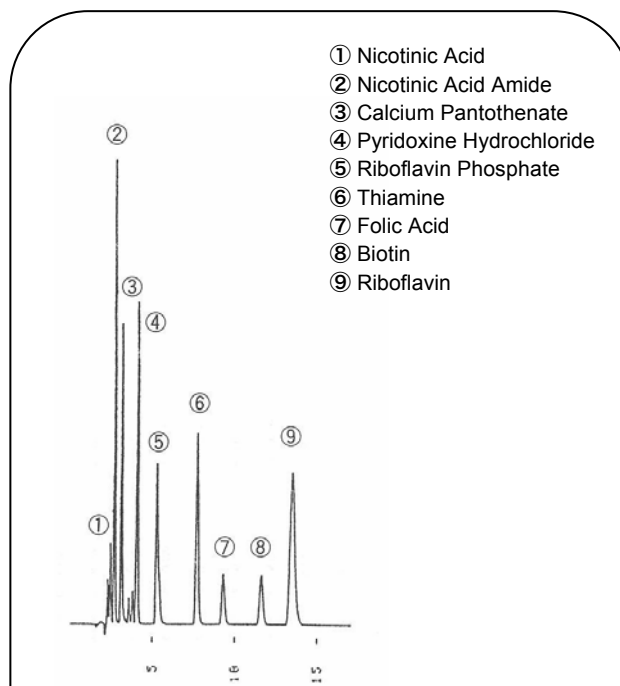
Column: ULTRON VX-ODS
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 10 mM (NH₄)₃PO₄ (pH 2.5) / CH₃CN = 80 / 20
Flow Rate: 1.0 mL/min
Temperature: 30 °C
Detection: UV-254 nm

Separation of The Steroid



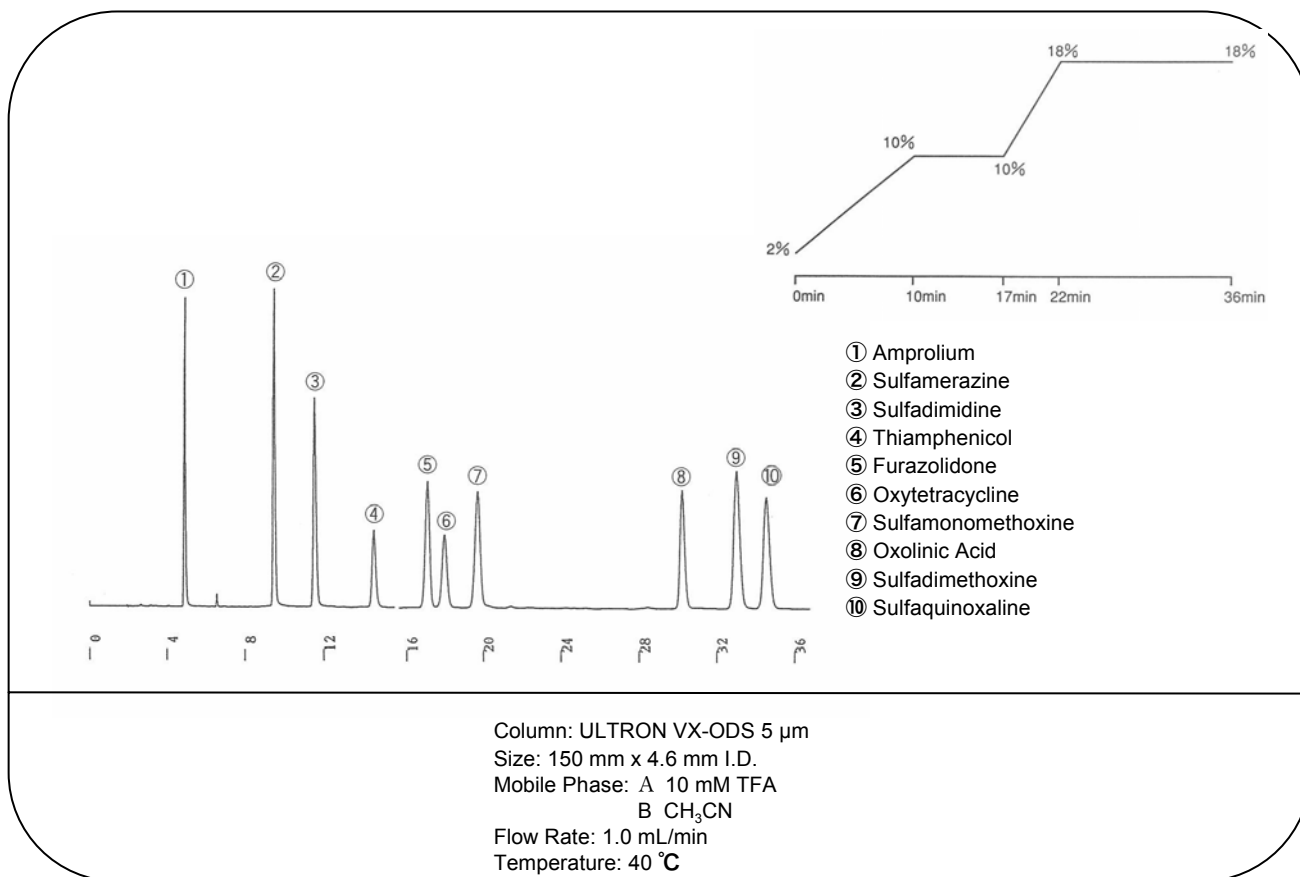
Column: ULTRON VX-ODS
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: H₂O / CH₃OH / THF = 70 / 10 / 20
Flow Rate: 1.0 mL/min
Temperature: 40 °C
Detection: UV-254 nm

The Water-soluble Vitamin

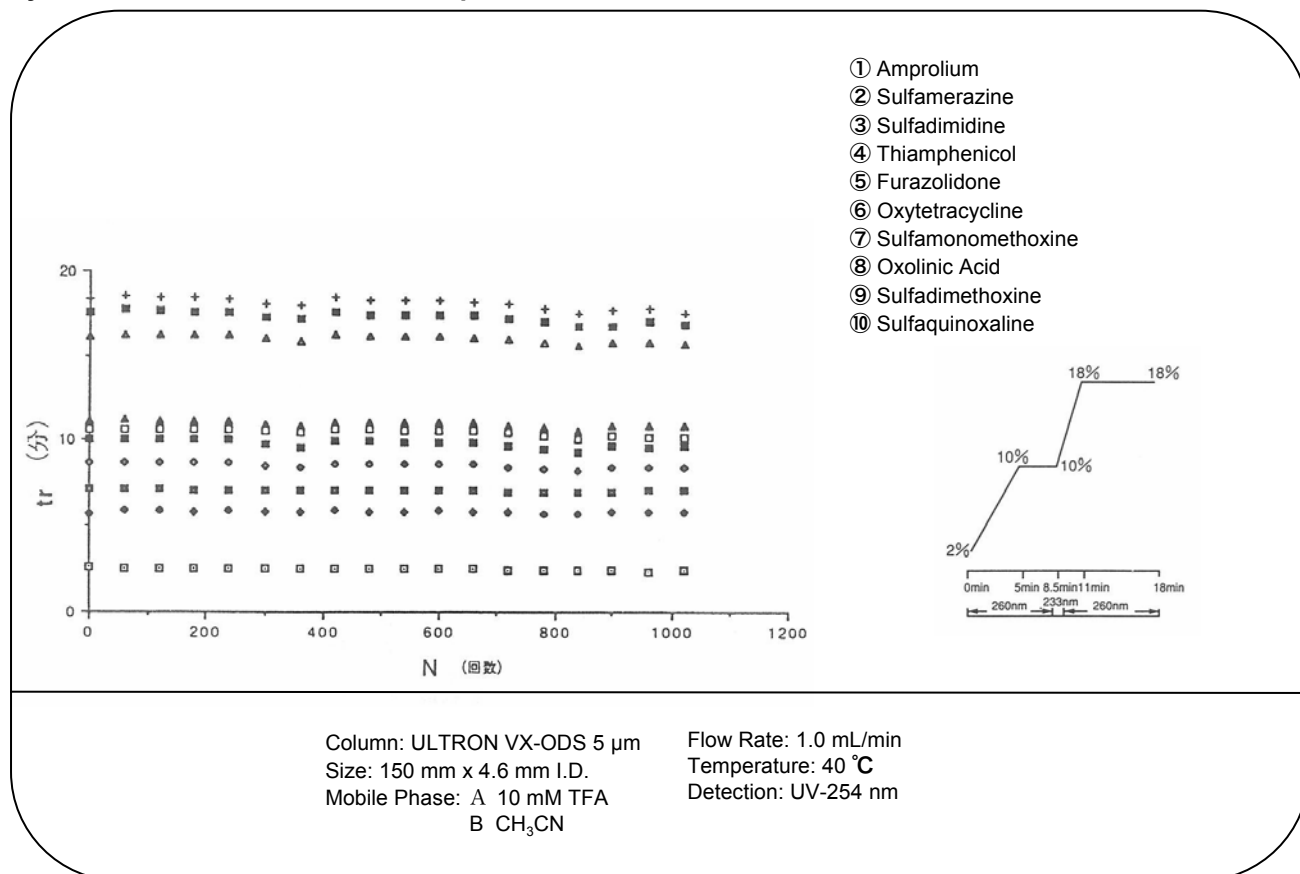


Column: ULTRON VX-ODS
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 20 mM H₃PO₄ / 5 mM CH₃(CH₂)₅SO₃Na = 91 / 9
Flow Rate: 1.0 mL/min
Temperature: 45 °C
Detection: UV-210 nm

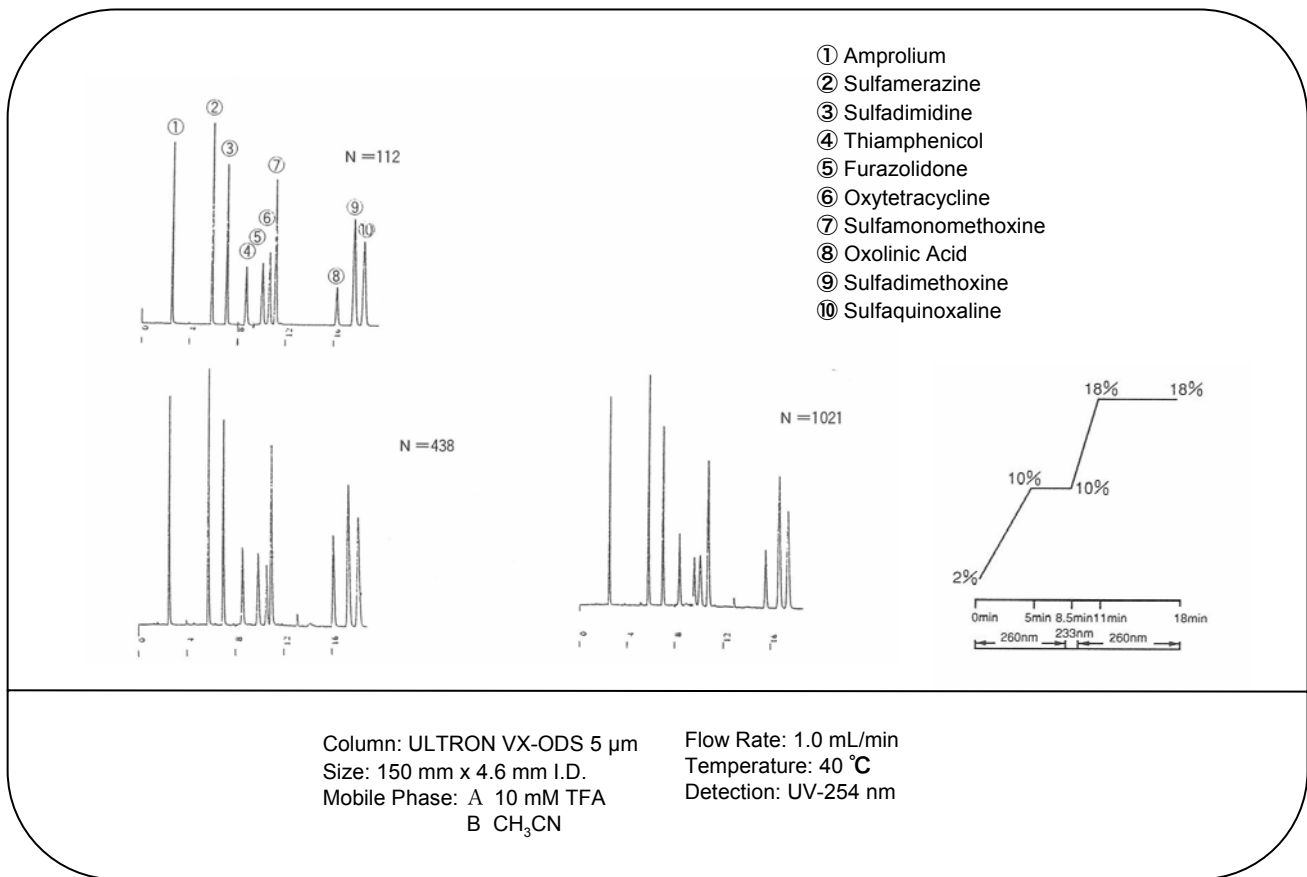
The Synthetic Antibacterial Medicine Simultaneity Analysis



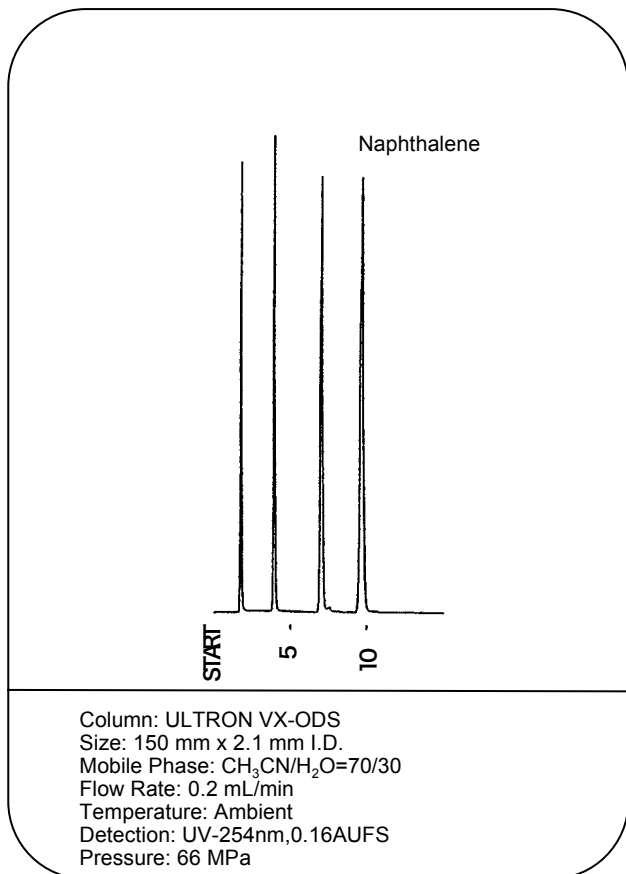
Synthetic Antibacterial Medicine Repeat Test



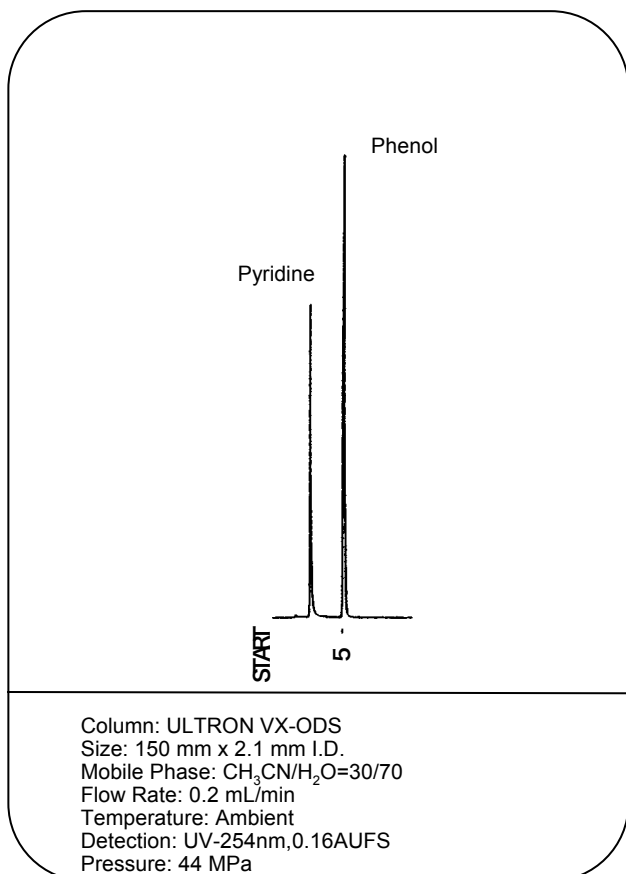
Chromatogram of The Repeat Test



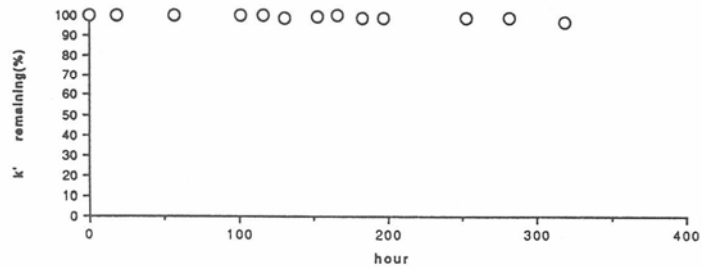
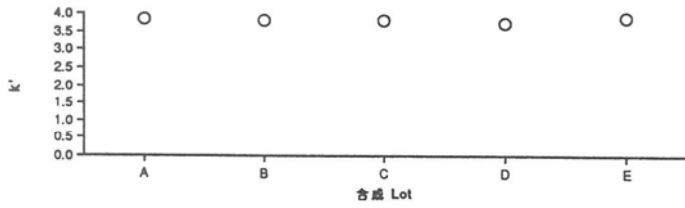
Naphthalene



Pyridine, Phenol Test



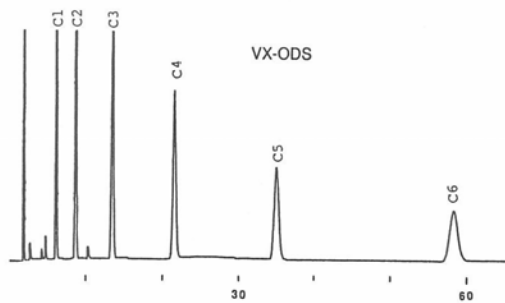
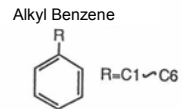
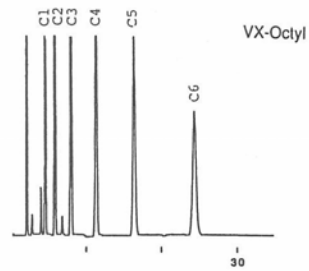
Life Test in Acidic Solution



Reproducibility
Between Syntheses Lots
Eluent Condition : 70 % Methanol
Flow Rate : 1.0 ml/min 40 °C
Sample : Naphthalene

Life Test in Acidic Solution
Mobile Phase :60 % Methanol, 0.1 %TFA(pH2.2)

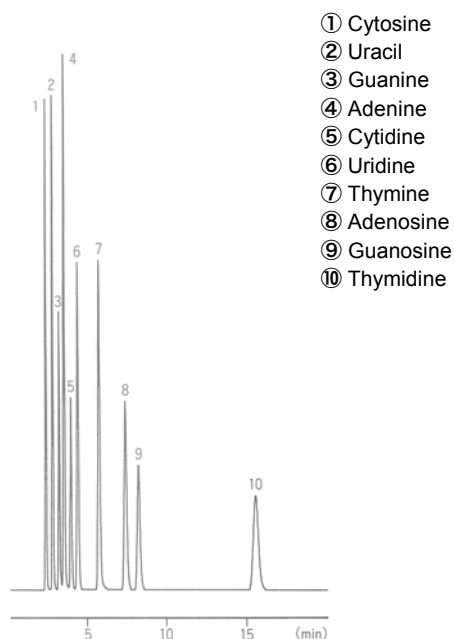
Comparison of Alkylbenzene in VX-Octyl and VX-ODS



Column: ULTRON VX-Octyl 5 μm
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: CH₃OH/H₂O

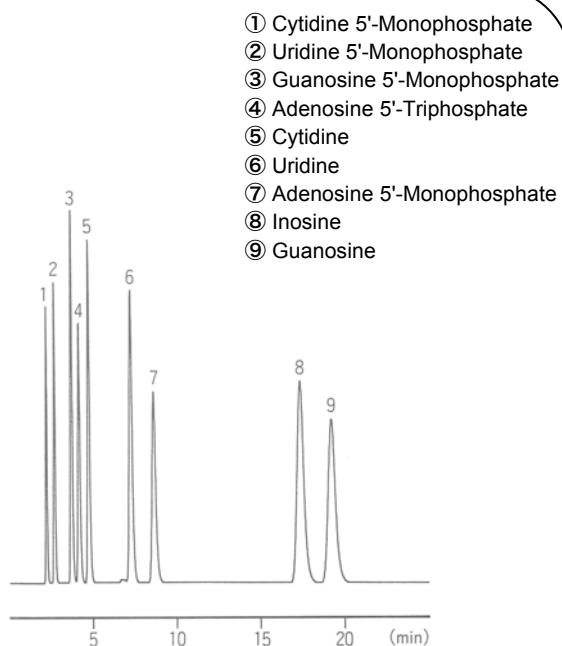
Flow Rate: 1.0 mL/min
Temperature: 40 °C
Detection: UV-254 nm

Nucleic Acid Base, Nucleoside



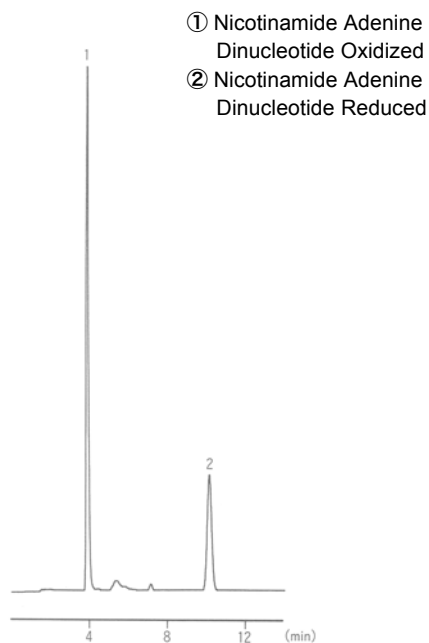
Column: STR ODS-II
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 0.1 M-Phosphate Buffer (pH2.1)
0.2 M NaClO₄
Flow Rate: 1.0 mL/min
Temperature: 50 °C
Detection: UV-260 nm (0.32 AUFS)

Nucleoside, Nucleotide



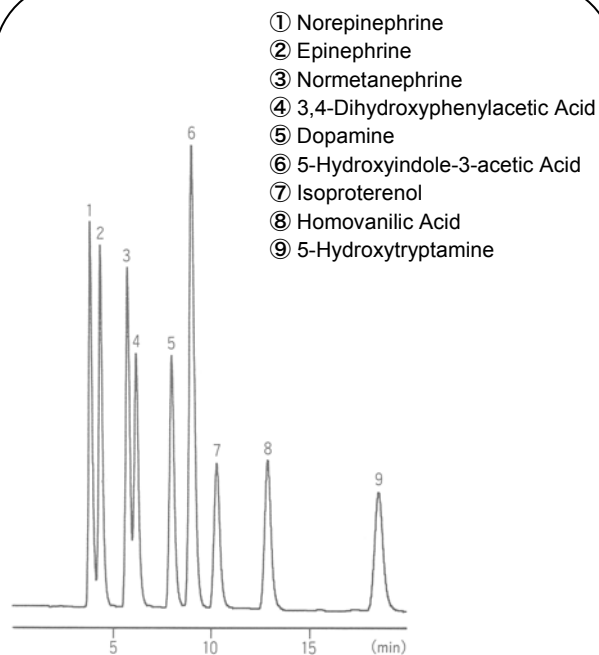
Column: STR ODS-II
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 0.1 M KH₂PO₄ (pH5.8)
0.2 mM Na₂SO₄
Flow Rate: 1.0 mL/min
Temperature: Ambient
Detection: UV-254 nm (0.32 AUFS)

NAD, NADH



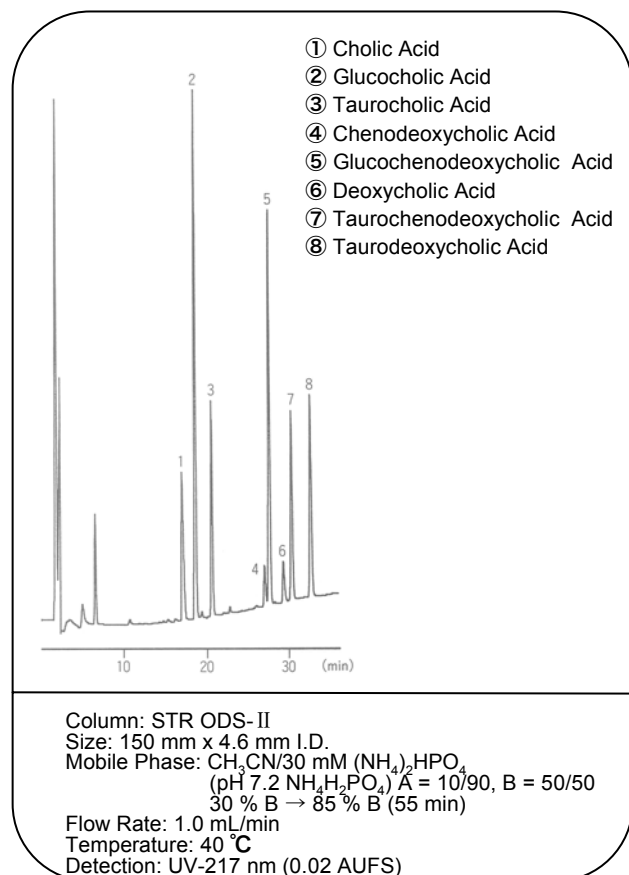
Column: STR ODS-II
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 10 mM NH₄H₂PO₄ (pH 2.6)
Flow Rate: 1.0 mL/min
Temperature: 40 °C
Detection: UV-260 nm (0.04 AUFS)

Catecholamine

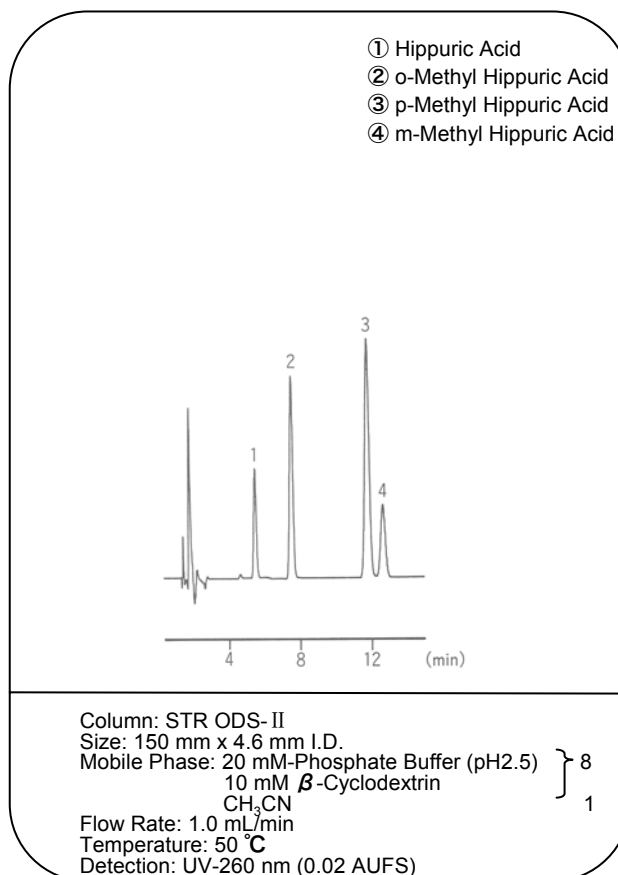


Column: STR ODS-II
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 0.1M Citric Acid, 0.1M Sodium Acetate(pH4)
/ 17% CH₃OH 1-Octane Sodium Sulphonate
160mg/L EDTA 5mg/L
Flow Rate: 1.0 mL/min
Temperature: 25 °C
Detection: ECD, 800 mV, 10 nA

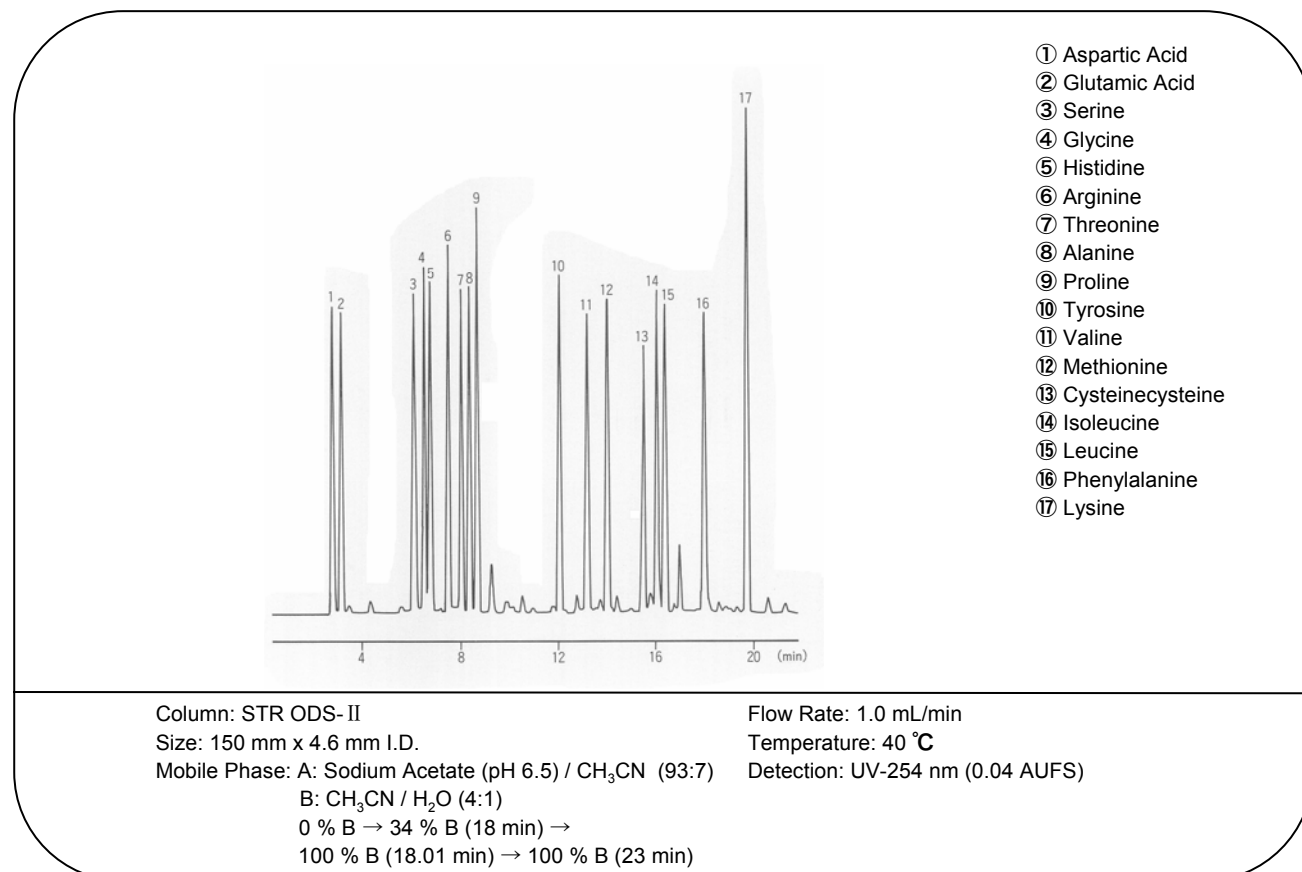
Bile Acid



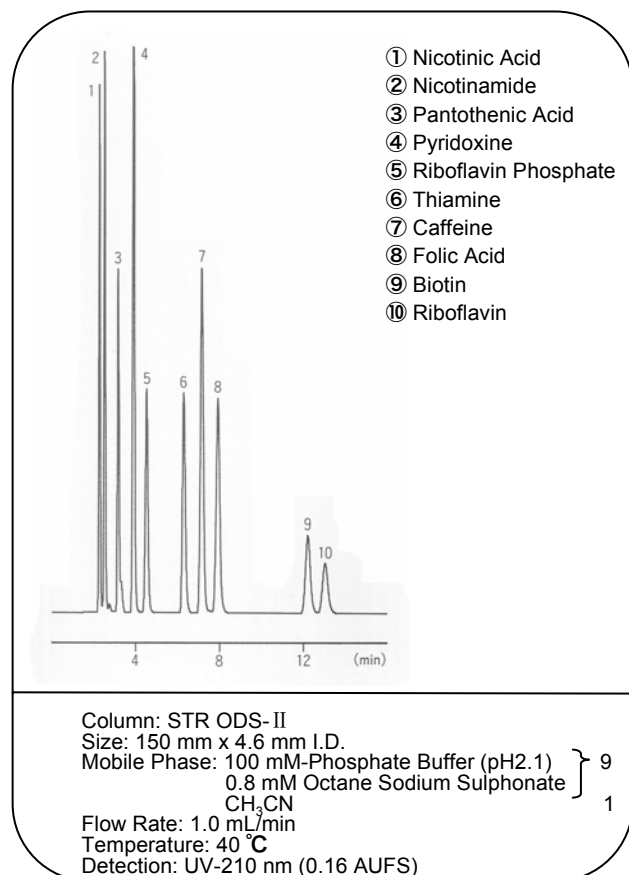
Hippuric Acid



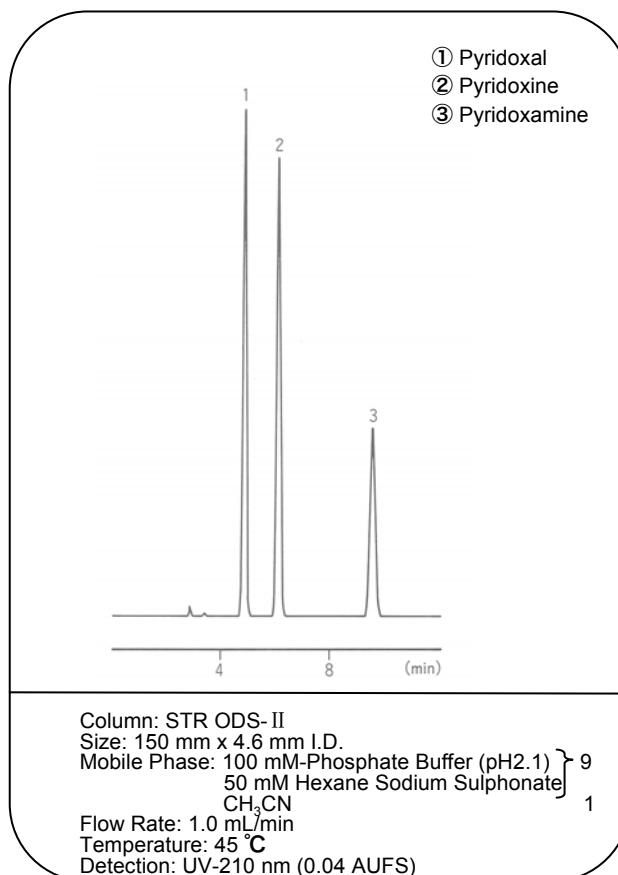
Analysis of The PTC Amino Acid



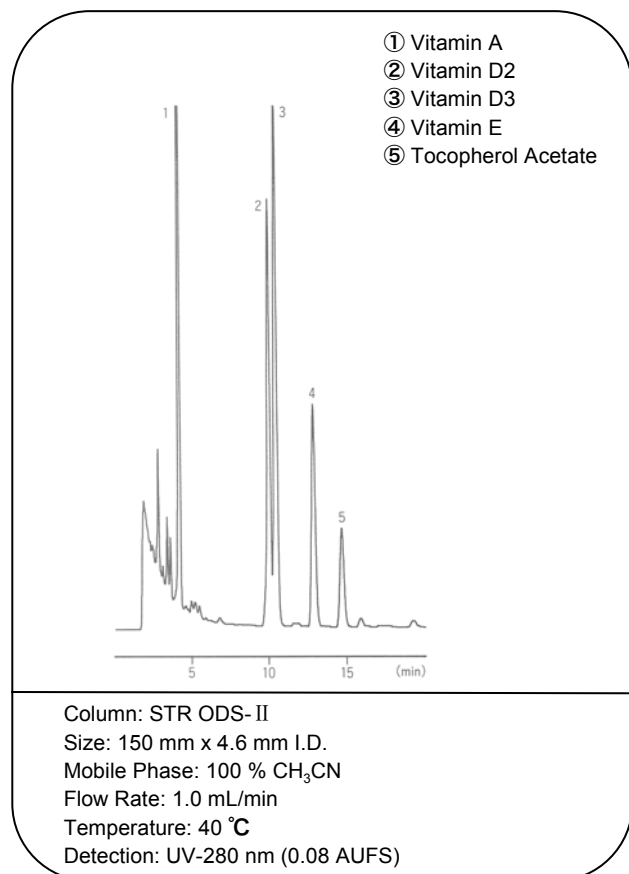
The Water-soluble Vitamin I



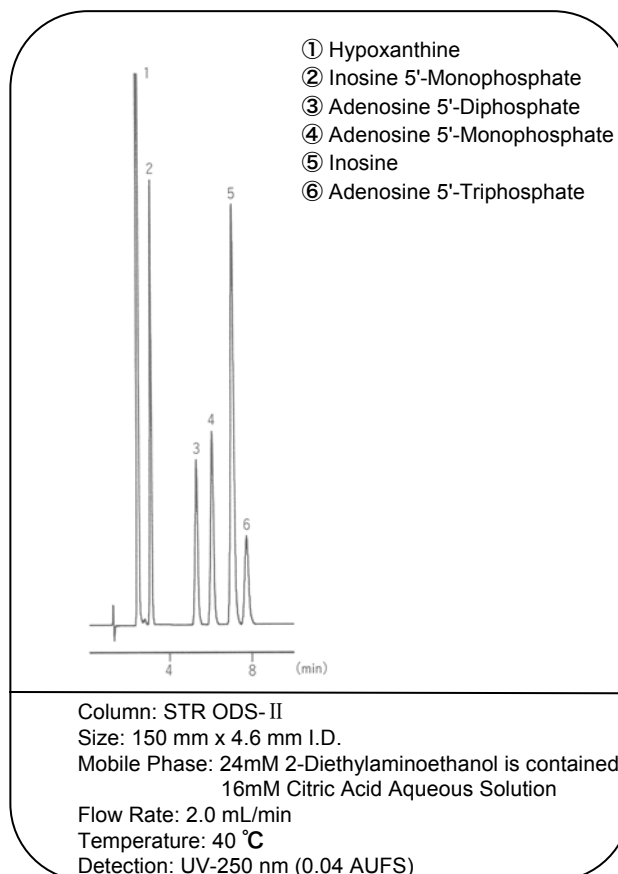
The Water-soluble Vitamin II



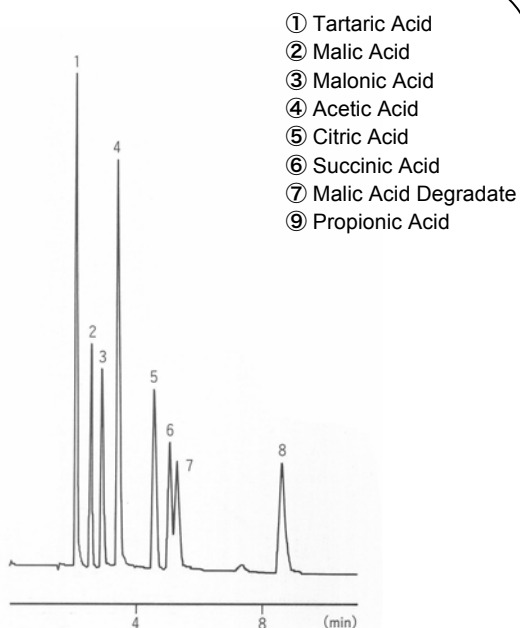
Fat-soluble Vitamin



The Freshness K Value

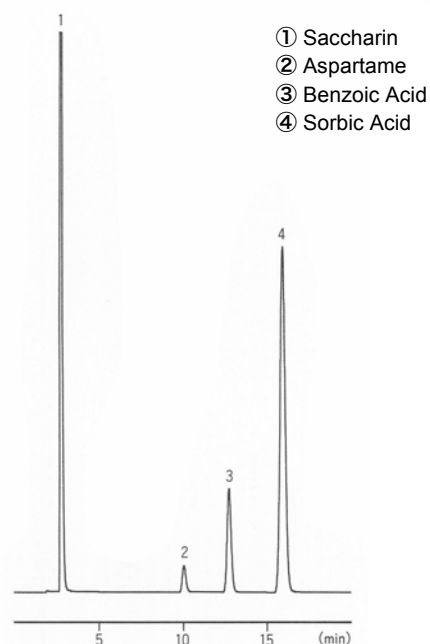


Organic Acids



Column: STR ODS-II
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 5mM $\text{NH}_4\text{H}_2\text{PO}_4$ (pH 2.4)
Flow Rate: 1.0 mL/min
Temperature: 40 °C
Detection: UV-210 nm (0.08 AUFS)

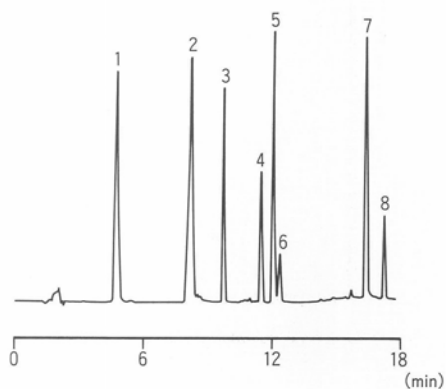
Saccharin, Aspartame, Benzoic Acid, Sorbic Acid



Column: STR ODS-II
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 40 mM Acetate Buffer (pH4.0) 3
 CH_3OH 1
Flow Rate: 1.0 mL/min
Temperature: 40 °C
Detection: UV-250 nm (0.16 AUFS)

The Phenolic System Antioxidant
(It is added to the edible oil of the marketing.)

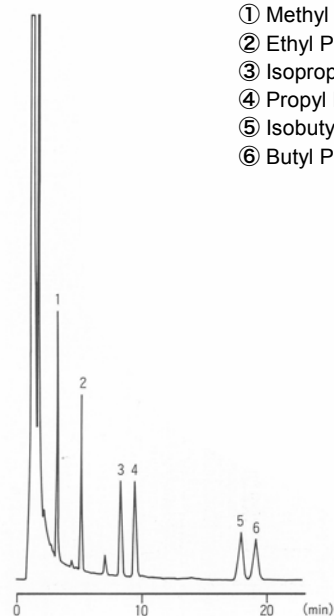
- ① Prostaglandin
② 2,4,5-Trihydroxybutyrophenone
③ Nordihydroguaiaretic Acid
④ Butyl Hydroxy Anisol
⑤ Octyl Gallate
⑥ 2,6-Di-t-butyl-4-hydroxy-methylphenol
⑦ Lauryl Gallate
⑧ 2,6-Di-t-butylhydroxytoluene



Column: STR ODS-II
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: A: 10 mM-Phosphate Buffer (pH2.6)
B: CH_3CN
30 % B → 30 % B (4 min) → 63 % B (4.01 min) →
63 % B (10 min) → 90 % (10.01 min) →
90 % B (16 min) → 30 % B (16.01 min) →
30 % B (25 min)
Flow Rate: 1.0 mL/min
Temperature: 40 °C
Detection: SPD-10A, 280 nm 2AU/V, AT = 7

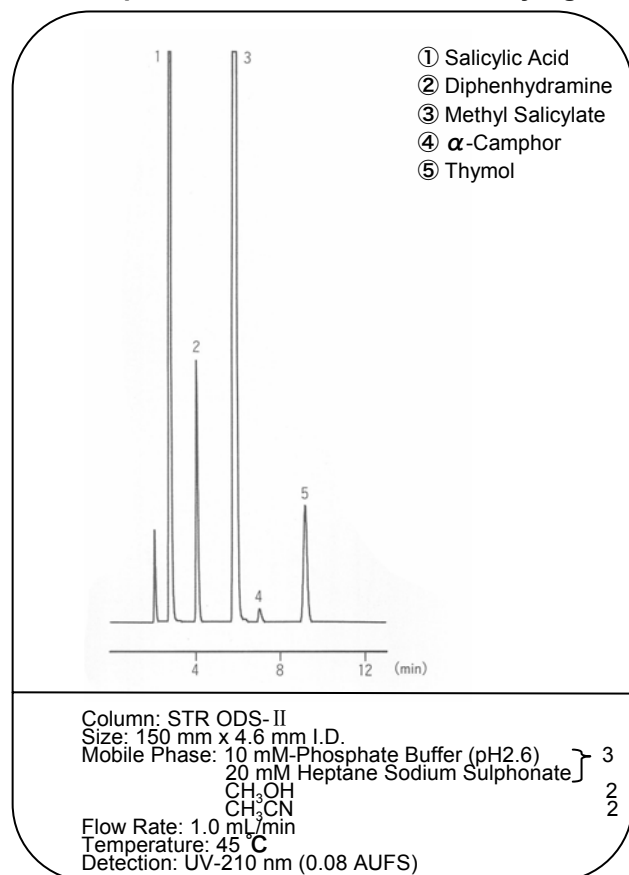
Paraben
(It is added to the soy sauce of the marketing.)

- ① Methyl Paraben
② Ethyl Paraben
③ Isopropyl Paraben
④ Propyl Paraben
⑤ Isobutyl Paraben
⑥ Butyl Paraben

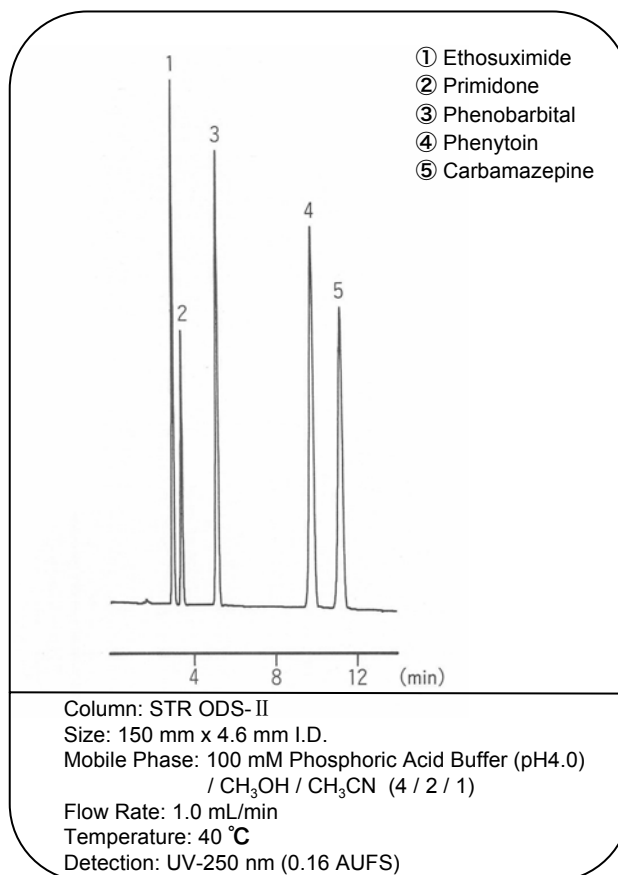


Column: STR ODS-II
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 10 mM-Phosphate Buffer (pH2.6)
 CH_3OH
Flow Rate: 1.5 mL/min
Temperature: 40 °C
Detection: SPD-10A, 270 nm 2AU/V, AT = 6

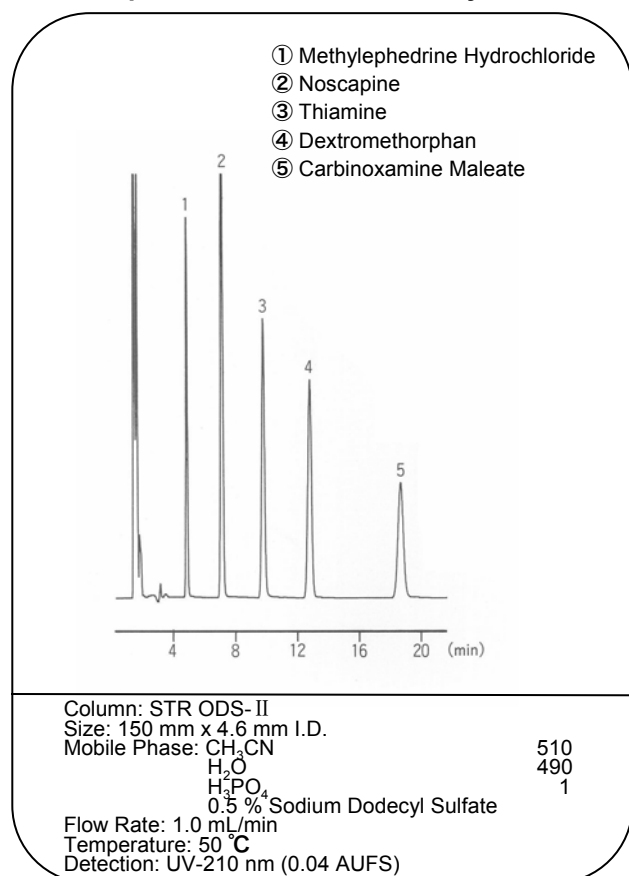
The Component of The Anti-inflammatory Agent



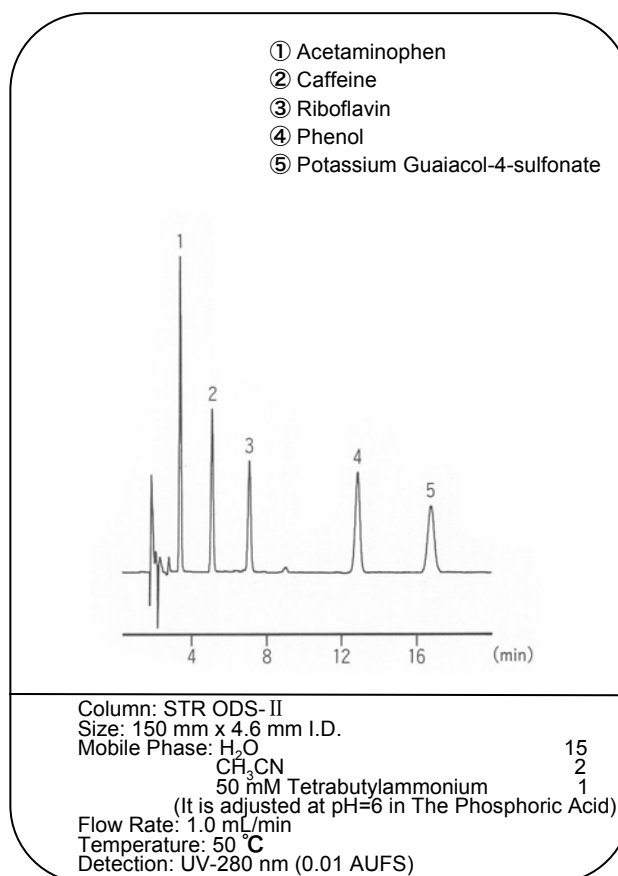
Anticonvulsant Analysis



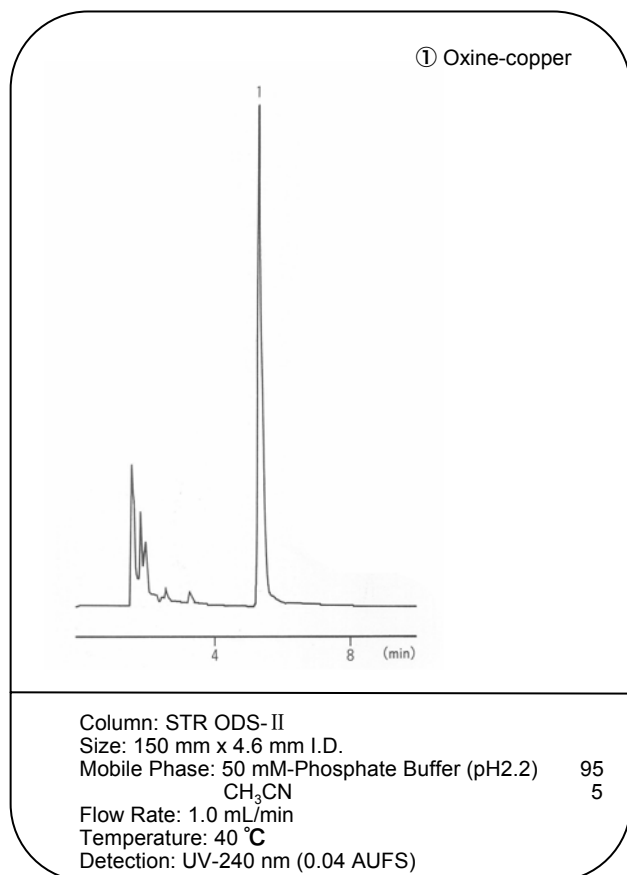
The Component of The Cold Remedy I



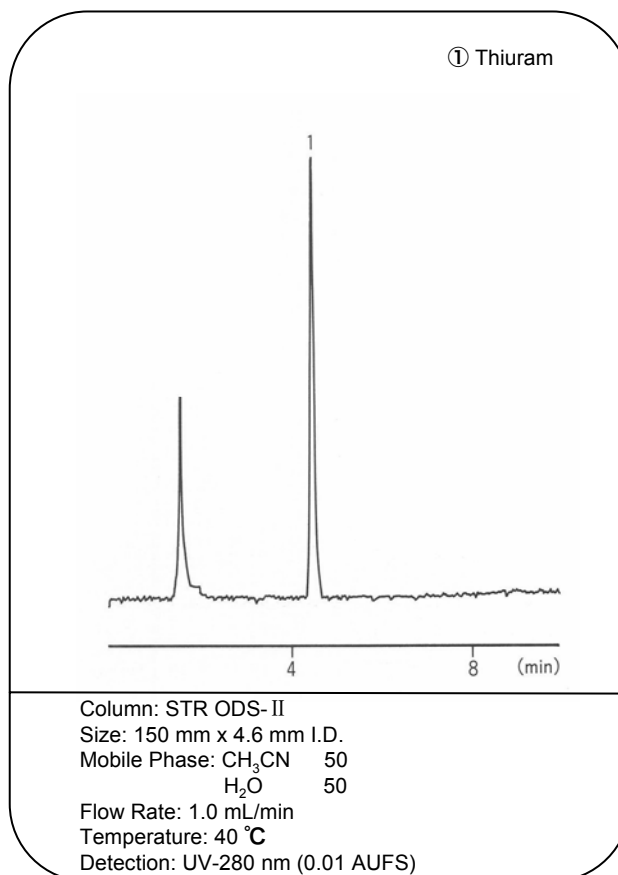
The Component of The Cold Remedy II



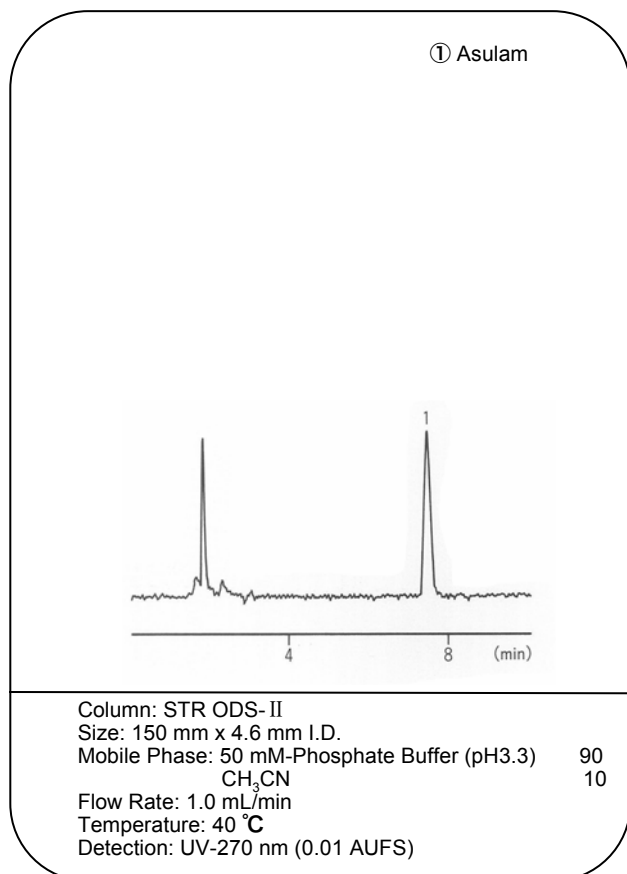
Oxine Copper



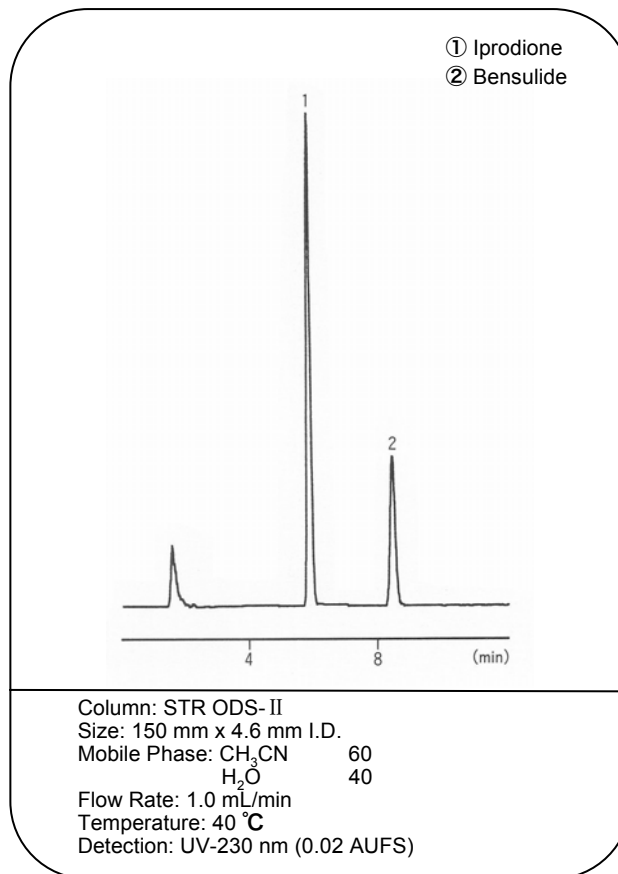
Thiuram



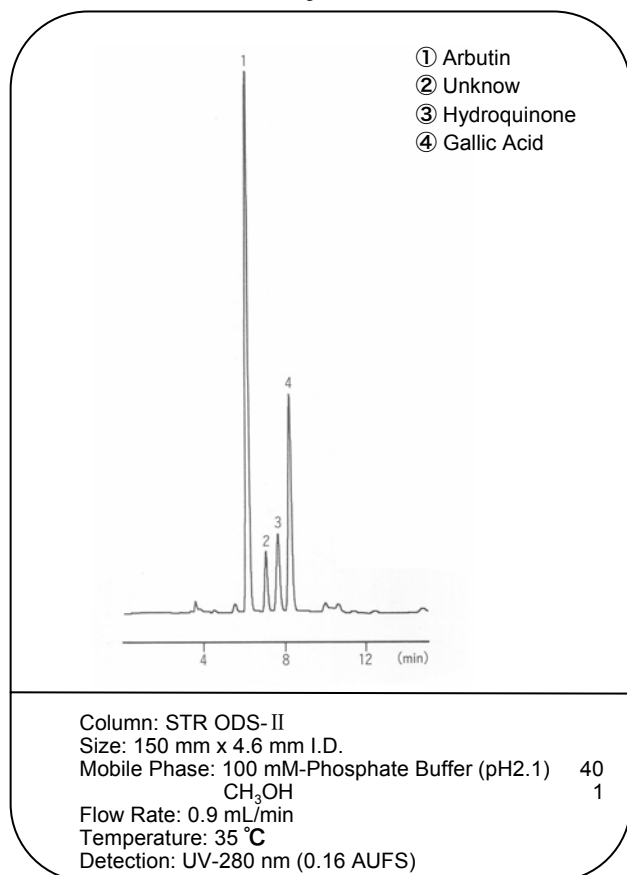
Asulam



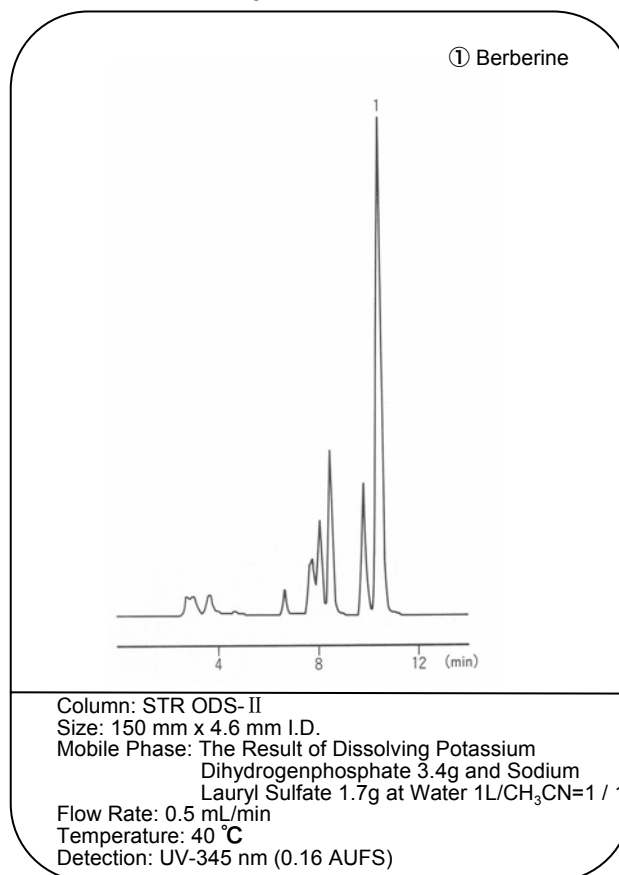
Iprodione, Bensulide



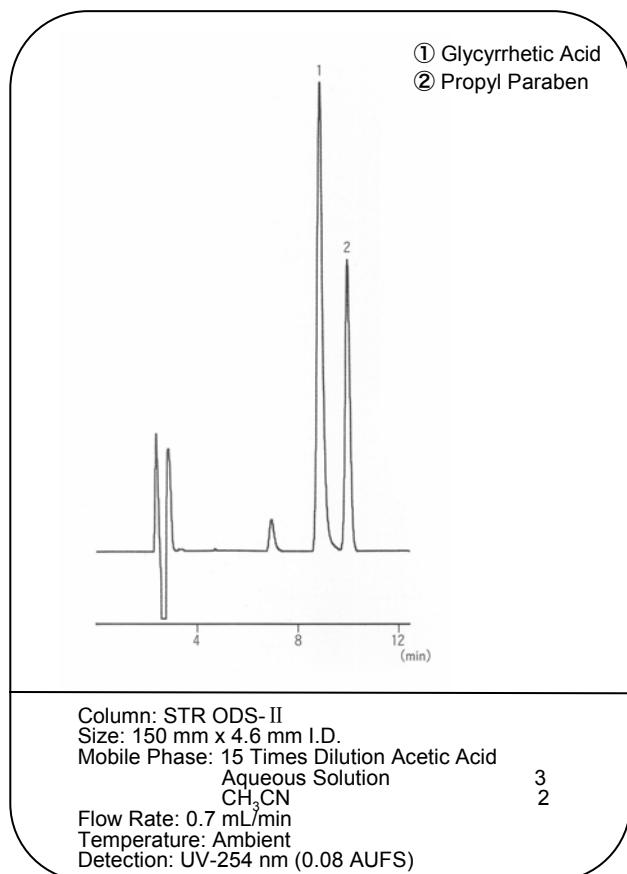
Arbutin in The Bearberry Leaf End



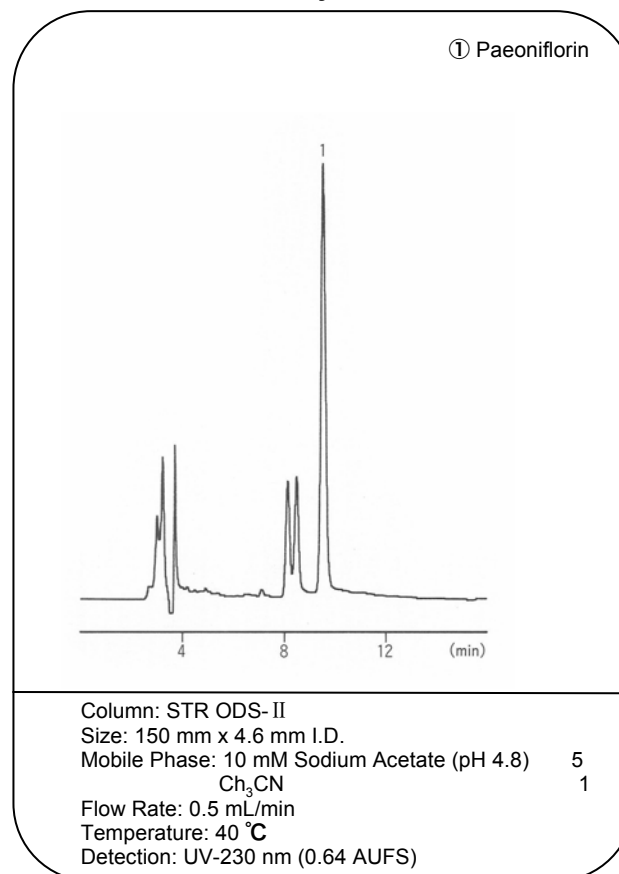
Berberine in The Coptis End



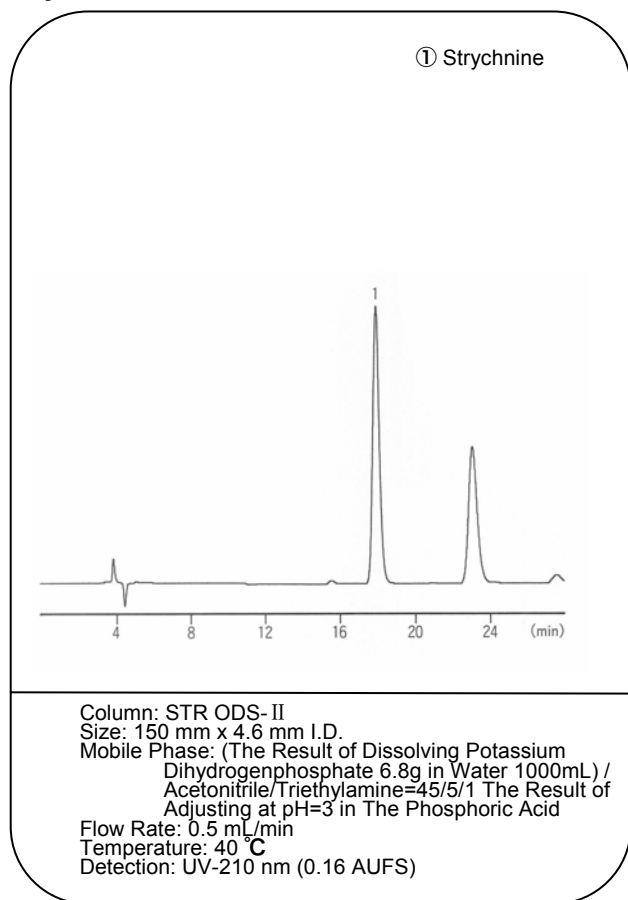
Glycyrrhizin in The Licorice End



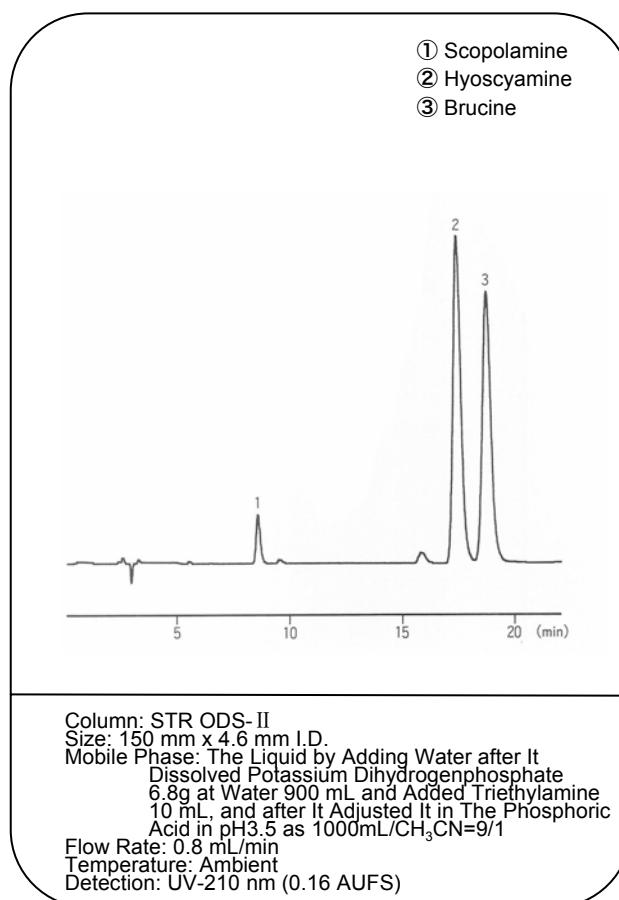
Paeoniflorin in The Peony End



Strychnine in Nux Vomica

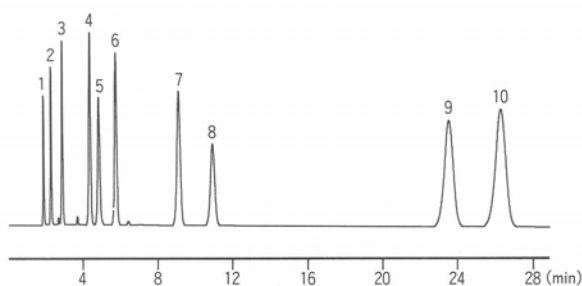


Scopolamine and Hyoscyamus Niger Thiamine in The Rohto Extract



Nucleoside, Nucleotide

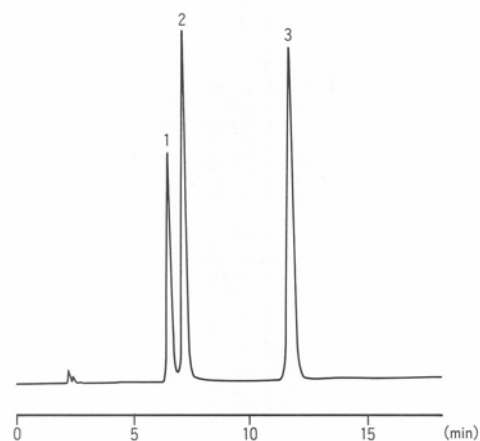
- ① Cytidine 5'-Diphosphate
- ② Cytidine 5'-Monophosphate
- ③ Uridine 5'-Monophosphate
- ④ Guanosine 5'-Monophosphate
- ⑤ Adenosine 5'-Triphosphate
- ⑥ Gytidine
- ⑦ Uridine
- ⑧ Adenosine 5'-Monophosphate
- ⑨ Inosine
- ⑩ Guanosine



Column: STR ODS-M
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 0.1 M KH_2PO_4 , 20 mM Na_2SO_4 (pH 5.8)
 Flow Rate: 1.0 mL/min
 Temperature: 30 °C
 Detection: UV-254 nm

AMP, ADP, ATP

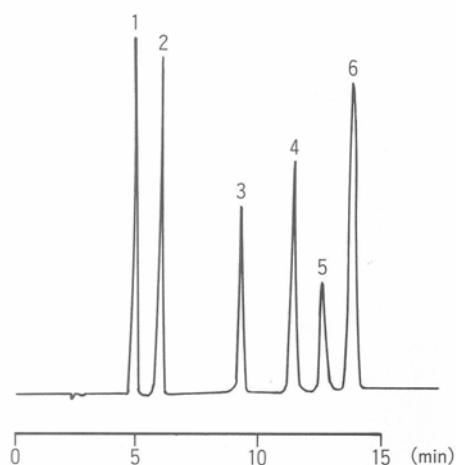
- ① Adenosine 5'-Monophosphate
- ② Adenosine 5'-Diphosphate
- ③ Adenosine 5'-Triphosphate



Column: STR ODS-M
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 30 mM 2-Diethylaminoethanol is contained
 20 mM Citric Acid Aqueous Solution
 Flow Rate: 0.8 mL/min
 Temperature: 40 °C
 Detection: UV-260 nm

The Freshness K Value

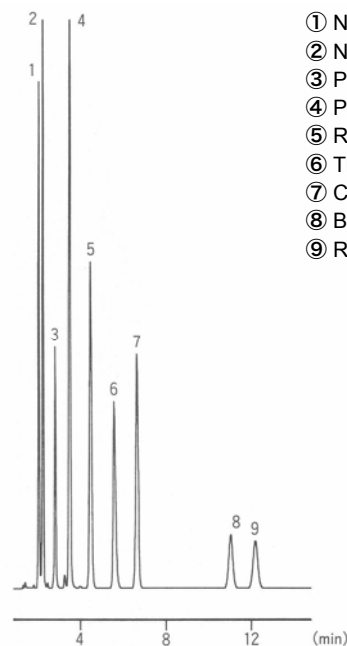
- ① Hypoxanthine
- ② Inosine 5'-Monophosphate
- ③ Adenosine 5'-Monophosphate
- ④ Adenosine 5'-Diphosphate
- ⑤ Adenosine 5'-Triphosphate
- ⑥ Isosine



Column: STR ODS-M
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 24 mM 2-Diethylaminoethanol is contained
 16 mM Citric Acid Aqueous Solution
 Flow Rate: 2.0 mL/min
 Temperature: 40 °C
 Detection: UV-250 nm

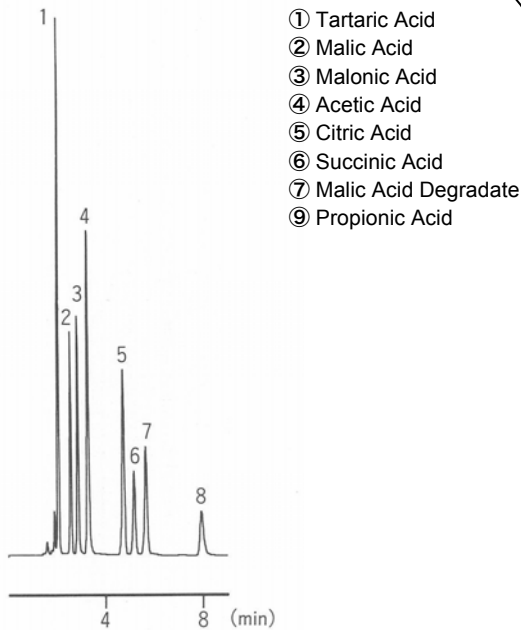
The Water-soluble Vitamin

- ① Nicotinic Acid
- ② Nicotinamide
- ③ Pantothenic Acid
- ④ Pyridoxine
- ⑤ Riboflavin Phosphate
- ⑥ Thiamine
- ⑦ Caffeine
- ⑧ Biotin
- ⑨ Riboflavin



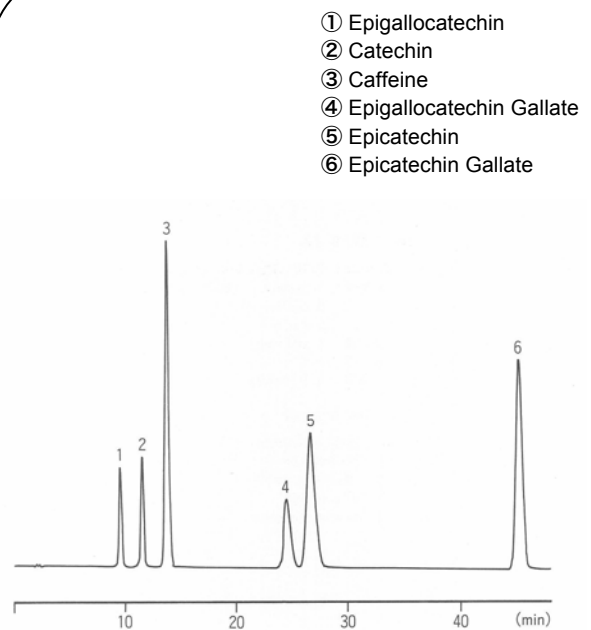
Column: STR ODS-M
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 100 mM-Phosphate Buffer (pH2.1)
 0.9 mM Octane Sodium Sulphonate } 9
 CH_3CN } 1
 Flow Rate: 1.0 mL/min
 Temperature: 40 °C
 Detection: UV-210 nm

Organic Acids



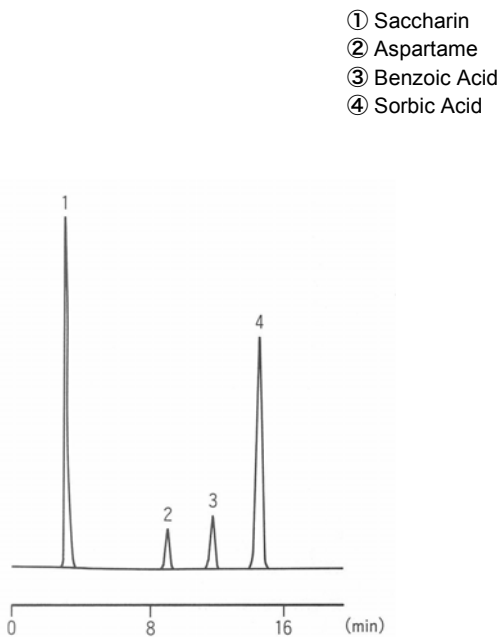
Column: STR ODS-M
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 10 mM NH_2PO_4
(It is adjusted at pH=2.3 in The Phosphoric Acid)
Flow Rate: 1.0 mL/min
Temperature: 40 °C
Detection: UV-210 nm

Caffeine and Catechin



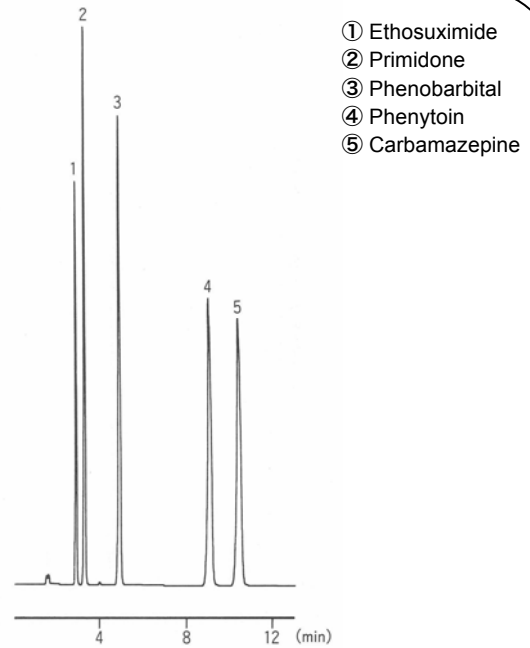
Column: STR ODS-M
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: A: 10 mM-Phosphate Buffer (pH2.6)
B: CH_3CN
7 % B → 7 % B (30 min) → 12 % B (30.01 min) →
12 % B (45 min) → 50 % B (45.01 min) →
50 % B (50 min) → 7 % B (50.01 min) →
7 % B (80 min)
Flow Rate: 1.0 mL/min
Temperature: 45 °C
Detection: UV-280 nm (0.64 AUFS)

Saccharin, Aspartame, Benzoic Acid, Sorbic Acid



Column: STR ODS-M
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 40 mM Acetate Buffer (pH4.0) 3
 CH_3OH 1
Flow Rate: 1.0 mL/min
Temperature: 40 °C
Detection: UV-250 nm (0.32 AUFS)

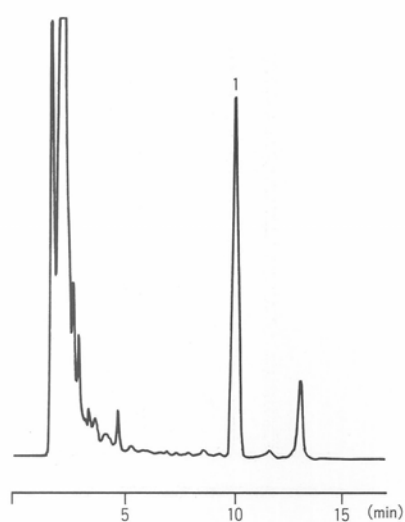
AnticoNvulsant Analysis



Column: STR ODS-M
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 100 mM-Phosphate Buffer (pH2.1) 4
 CH_3OH 2
 CH_3CN 1
Flow Rate: 1.0 mL/min
Temperature: 40 °C
Detection: UV-205 nm

Nicarbazin

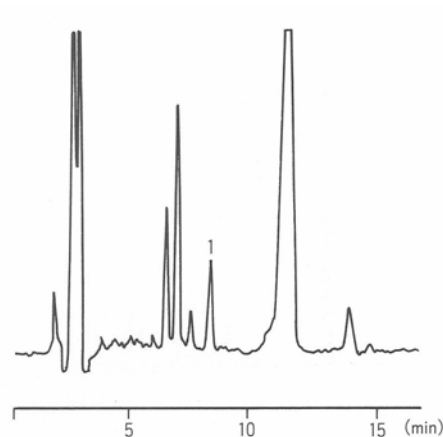
① Nicarbazin



Column: STR ODS-M
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 10 mM-Phosphate Buffer (pH2.6) 30
 CH₃CN 70
 Flow Rate: 0.8 mL/min
 Temperature: 40 °C
 Detection: UV-340 nm

Ethopabate

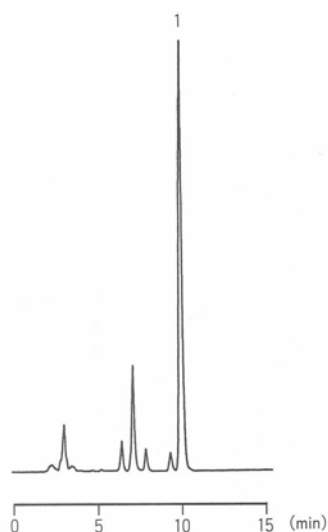
① Ethopabate



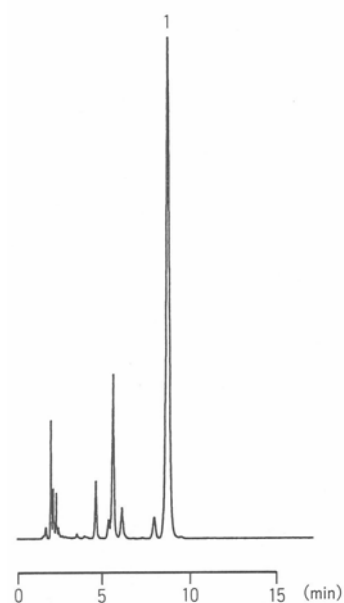
Column: STR ODS-M
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: H₂O 70
 CH₃CN 30
 Flow Rate: 0.7 mL/min
 Temperature: 40 °C
 Detection: UV-270 nm

Berberine

① Berberine



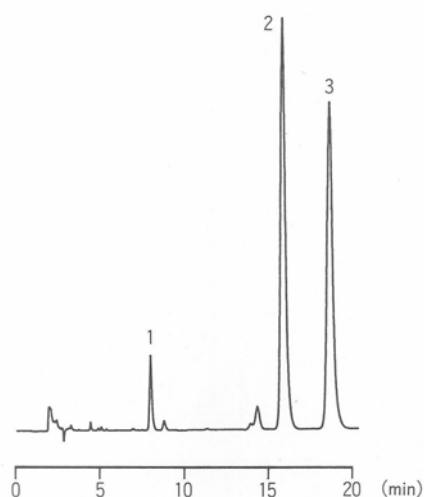
① Column: STR ODS-M
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: The Result of Dissolving Potassium
 Dihydrogenphosphate 3.4g and Sodium
 Lauryl Sulfate 1.7g at Water 1L / CH₃CN=1 / 1
 Flow Rate: 0.6 mL/min
 Temperature: 40 °C
 Detection: UV-345 nm



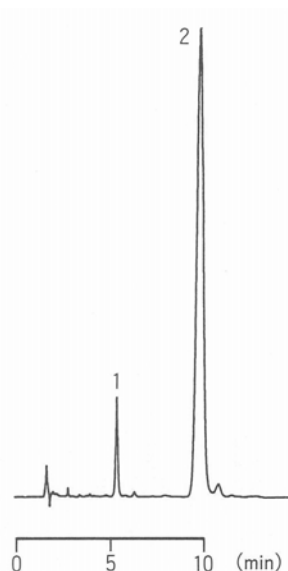
② Column: STR ODS-M
 Size: 150 mm x 4.6 mm I.D.
 Mobile Phase: 10 mM-Phosphate Buffer (pH 2.6) } 5
 200 mM NaClO₄ }
 CH₃CN } 3
 Flow Rate: 1.0 mL/min
 Temperature: 40 °C
 Detection: UV-345 nm

Scopolanime, Hyoscyamine

- ① Scopolanime
② Hyoscyamine
③ Brucine



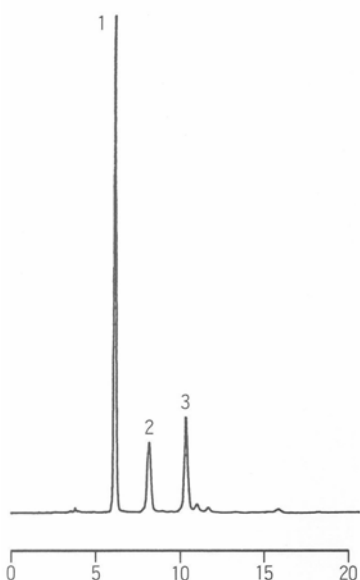
① Column: STR ODS-M Size: 150 mm x 4.6 mm I.D.
Mobile Phase: The Liquid by Adding Water after It
Dissolved Potassium Dihydrogenphosphate
6.8g at Water 900 mL and Added Triethylamine
10 mL, and after It Adjusted It in The Phosphoric
Acid in pH3.5 as 1000 mL / CH₃CN = 9 / 1
Flow Rate: 0.8 mL/min Temperature: ambient
Detection: UV-210 nm



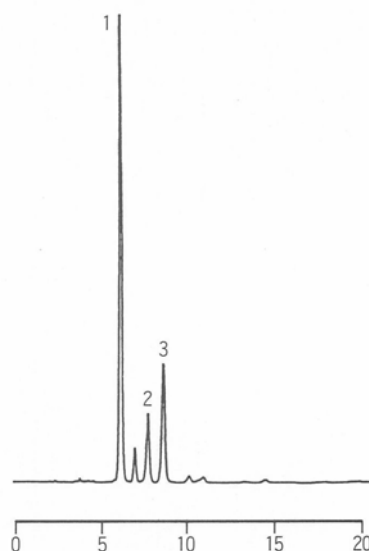
② Column: STR ODS-M
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 10 mM-Phosphate Buffer (pH 2.6) } 3
200 mM NaClO₄
CH₃CN } 1
Flow Rate: 1.0 mL/min
Temperature: 40 °C
Detection: UV-210 nm

Arbutin

- ① Arbutin
② Hydroquinone
③ Gallic Acid

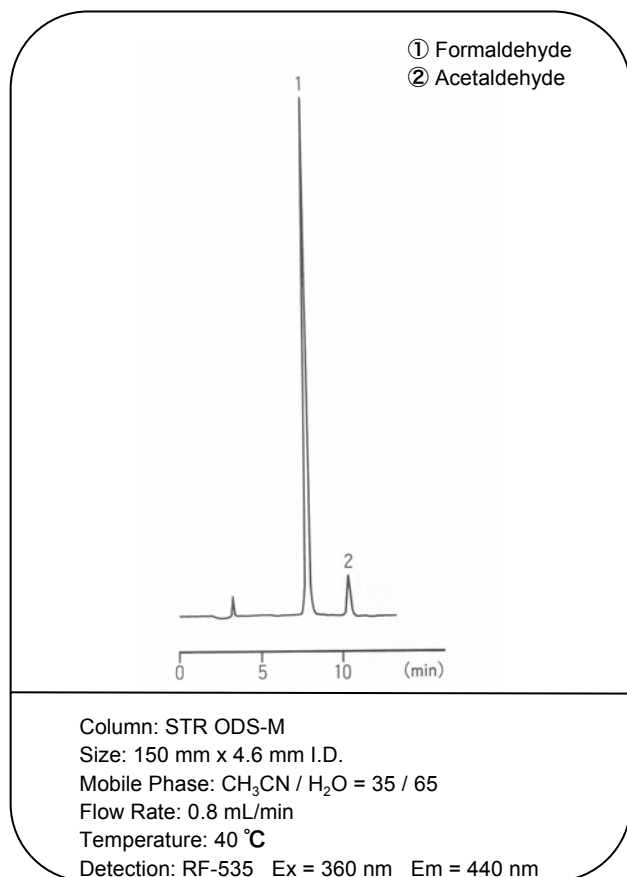


① Column: STR ODS-M
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: H₂O / CH₃OH / 0.1N-HCl = 94 / 5 / 1
Flow Rate: 0.8 mL/min
Temperature: Ambient
Detection: UV-280 nm



② Column: STR ODS-M
Size: 150 mm x 4.6 mm I.D.
Mobile Phase: 100 mM-Phosphate Buffer (pH 2.1)
/ CH₃OH = 40 / 1
Flow Rate: 0.8 mL/min
Temperature: 40 °C
Detection: UV-280 nm

Aldehydes (1.3-Cyclohexanedione Derivatives)



INDEX

A	
Acetaldehyde	38, 62
Acetaminophen	54
Acetic Acid	37, 38, 39, 53, 59
N-Acetylgalactosamine	38
N-Acetylglucosamine	38
Acetylpheneturide	18, 33
Acetylsalicylic Acid	46
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