

YMC APPLICATION DATA

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1

ビタミン
Vitamins

2

糖類
Carbohydrates

3

核酸
Nucleic acids

4

アミノ酸、ペプチド、
タンパク質
Amino acids, Peptides,
Proteins

5

有機酸、脂肪酸誘導体
Organic acids,
Fatty acid derivatives

6

食品添加物
Food additives

7

天然物
Natural products

8

ステロイド
Steroids

9

医薬品、生体関連物質
Drugs, Metabolites

10

抗菌剤、抗生物質
Antibiotics

11

農薬、環境関連物質
Pesticides,
Environmental

12

その他
The others

13

光学異性体
Optical isomers

1 ビタミン

Vitamins

脂溶性ビタミン	Oil-soluble vitamins	8
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2 糖類

Carbohydrates

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3 核酸**Nucleic acids**

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6 食品添加物

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7 天然物

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8 ステロイド

Steroids

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9 医薬品、生体関連物質

Drugs, Metabolites

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馬尿酸類	Hippuric and methylhippuric acids	98,99

10 抗菌剤、抗生物質

Antibiotics

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11 農薬、環境関連物質

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12 その他

The others

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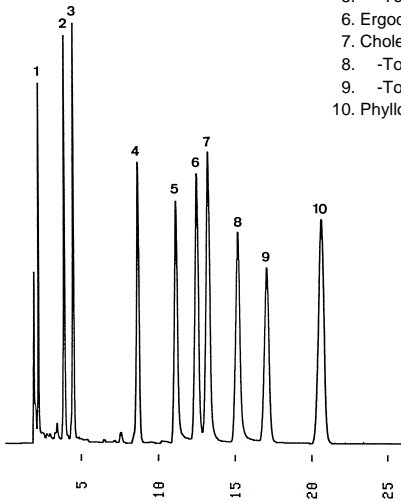
13 光学異性体

Optical isomers

ビナフトール	1,1'-Bi-2-naphthol	126
トリフルオロアンスリルエタノール	2,2,2-Trifluoro-1-(9-anthryl)-ethanol	126
ヘキソバルビタール	Hexobarbital	126,128
CBZ-フェニルアラニン	CBZ-Phenylalanine(Z-Phe-OH)	126,129,130
塩酸プロプラノロール	Propranolol hydrochloride	127,130
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フルルビプロフェン	Flurbiprofen	128,129
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ナフチルエチルアルコール	1-(1-Naphthyl)-ethylalcohol	129
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脂溶性ビタミン Oil-soluble vitamins

1. Menadione (Vitamin K₃)
2. Retinol (Vitamin A)
3. Retinol acetate
4. Menaquinone (Vitamin K₂)
5. α-Tocopherol
6. Ergocalciferol (Vitamin D₂)
7. Cholecalciferol (Vitamin D₃)
8. γ-Tocopherol (Vitamin E)
9. δ-Tocopherol acetate
10. Phylloquinone (Vitamin K₁)

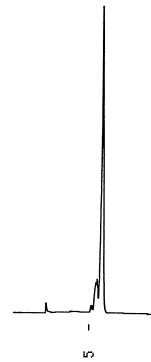


(G910415B)

Column : YMC-Pack ODS-A (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : acetonitrile
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 280 nm, 0.08 AUFS
Injection : 15 μ L (0.01 ~ 0.21 mg/mL)

ビタミン A 脂肪酸エステル Vitamin A fatty acid ester

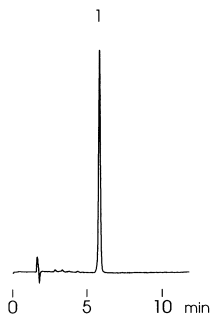
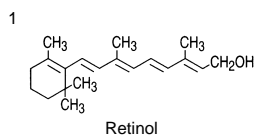
1. Retinol palmitate
(Vitamin A palmitate)



(G910523T)

Column : YMC-Pack SIL (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : cyclohexane/dichloromethane/acetic acid (100/0.5/0.5)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 350 nm, 0.32 AUFS
Injection : 5 μ L (1.0 mg/mL)

レチノール Retinol

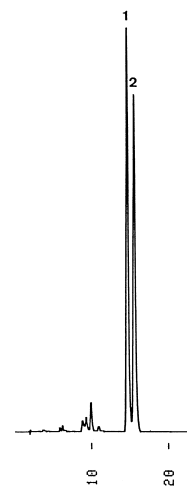


(A970708A)

Column : YMC-Pack Pro C18 (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : methanol/water (92/8)
Flow rate : 1.0 mL/min
Temperature : 35
Detection : UV at 325 nm, 0.02 AUFS
Injection : 20 μ L (0.5 μ g/mL)

カロテン Carotene

1. α-Carotene
2. β-Carotene

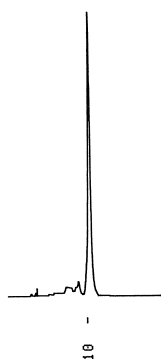


(G910523Q)

Column : YMC-Pack ODS-A (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : acetonitrile/methanol/THF (50/45/5)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : VIS at 450 nm, 0.16 AUFS
Injection : 5 μ L (0.05 mg/mL)

-カロテン
-Carotene

1. -Carotene

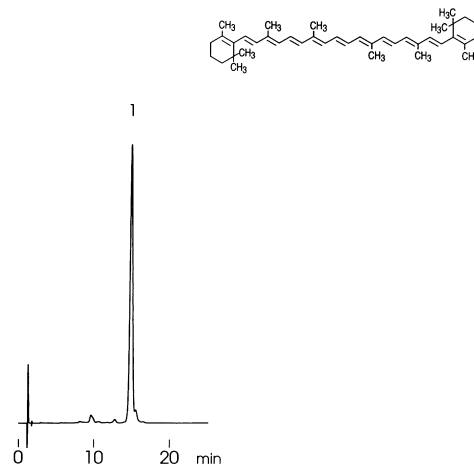


(M910529A)

Column : YMC-Pack CN (5 μm, 12nm)
250 × 4.6 mm I.D.
Eluent : acetonitrile/water/THF (35/35/30)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : VIS at 450 nm, 0.32 AUFS
Injection : 7 μL (0.125 mg/mL)

-カロテン
-Carotene

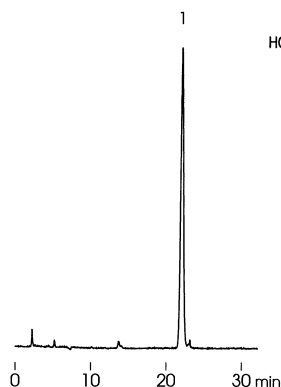
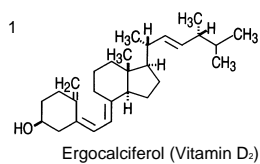
1. -Carotene



(A970716K)

Column : YMC-Pack ODS-AL (5 μm, 12nm)
150 × 4.6 mm I.D.
Eluent : methanol/chloroform (96/4)
Flow rate : 1.5 mL/min
Temperature : 35
Detection : VIS at 455 nm, 0.04 AUFS
Injection : 20 μL (4.0 μg/mL)

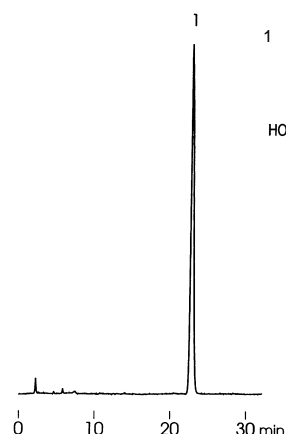
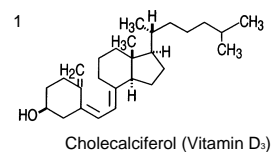
ビタミン D
Vitamin D



(C970808E)

Column : YMC-Pack SIL (5 μm, 12nm)
250 × 4.6 mm I.D.
Eluent : hexane/2-propanol (99.6/0.4)
Flow rate : 1.6 mL/min
Temperature : ambient (28)
Detection : UV at 265 nm, 0.01 AUFS
Injection : 100 μL (1.0 μg/mL)

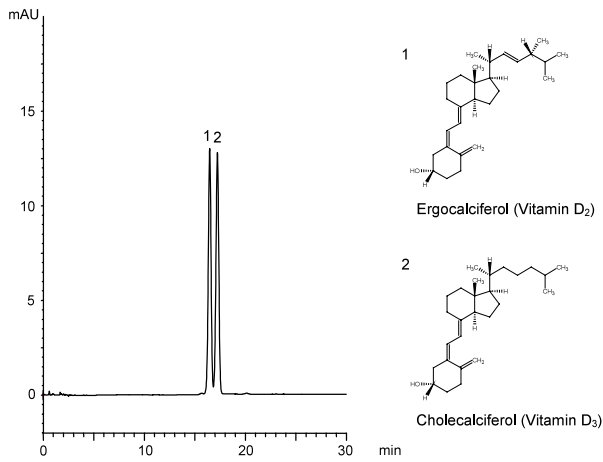
ビタミン D
Vitamin D



(C970808H)

Column : YMC-Pack SIL (5 μm, 12nm)
250 × 4.6 mm I.D.
Eluent : hexane/2-propanol (99.6/0.4)
Flow rate : 1.6 mL/min
Temperature : ambient (28)
Detection : UV at 265 nm, 0.01 AUFS
Injection : 100 μL (1.0 μg/mL)

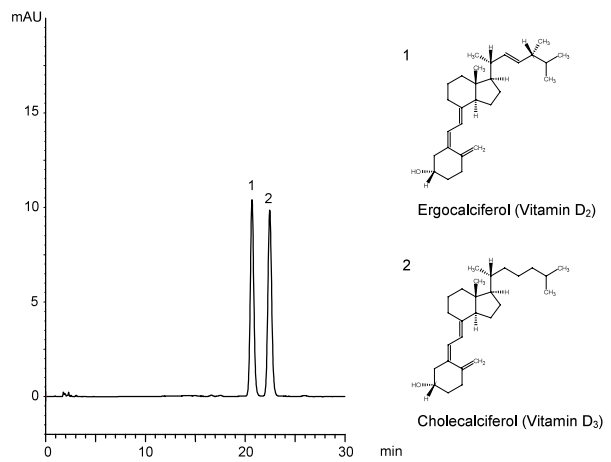
ビタミンD₂とビタミンD₃ Vitamin D₂ and vitamin D₃



(P040818A)

Column : YMC-Pack ODS-A (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : acetonitrile/water (95/5)
Flow rate : 1.0 mL/min
Temperature : 40
Detection : UV at 265 nm
Injection : 10 μ L (0.01 mg/mL)

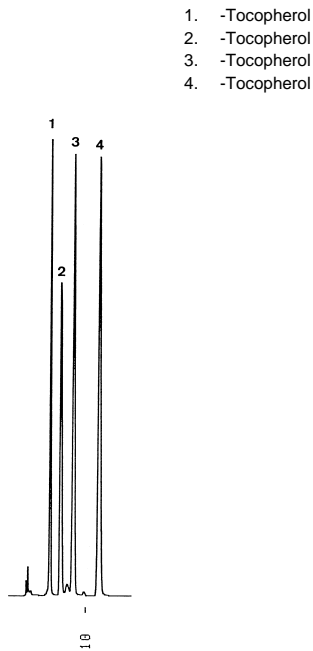
ビタミンD₂とビタミンD₃ Vitamin D₂ and vitamin D₃



(P040819C)

Column : YMC-Pack ODS-AL (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : acetonitrile/water (95/5)
Flow rate : 1.0 mL/min
Temperature : 40
Detection : UV at 265 nm
Injection : 10 μ L (0.01 mg/mL)

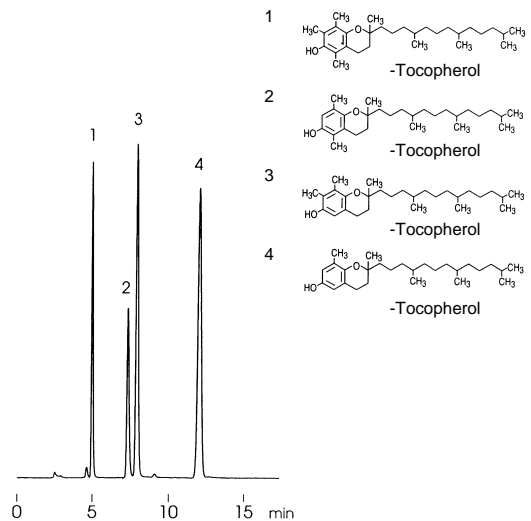
トコフェロール Tocopherols



(G910523S)

Column : YMC-Pack SIL (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : hexane/THF/acetic acid (97/3/0.25)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 295 nm, 0.08 AUFS
Injection : 10 μ L (0.20 ~ 0.31 mg/mL)

トコフェロール Tocopherols



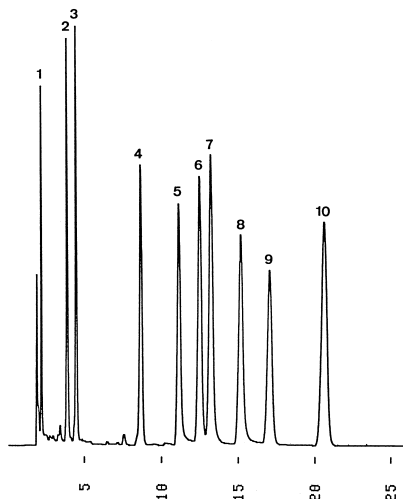
(S970702A)

Column : YMC-Pack SIL (5 μ m, 12nm)
250 × 4.6 mm I.D.
Eluent : hexane/2-propanol/acetic acid (1000/6/5)
Flow rate : 1.4 mL/min
Temperature : 35
Detection : FLS at Ex 298 nm, Em 325 nm
Injection : 20 μ L (5 ~ 20 μ g/mL)

トコフェロール

Tocopherols

1. -Tocopherol
2. -Tocopherol
3. -Tocopherol
4. -Tocopherol

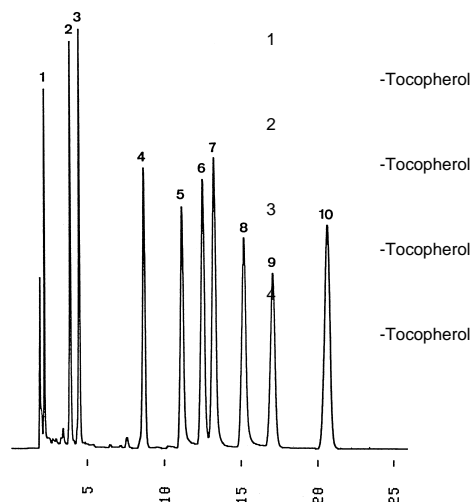


(T910501A)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : n-hexane/tetrahydrofuran/acetic acid/water (93/7/0.4/0.01)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 295 nm, 0.08 AUFS
Injection : 7 μL (0.25 mg/mL)

トコフェロール

Tocopherols

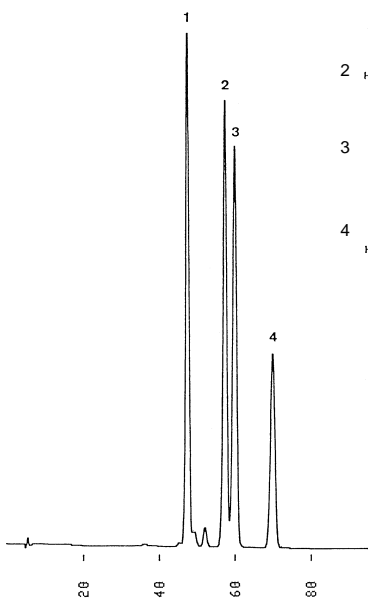
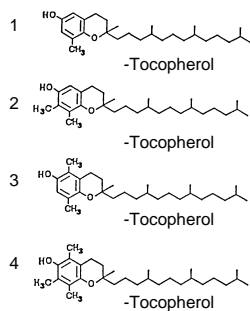


(T920728E)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : hexane/ethyl acetate (70/30)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 295 nm, 0.08 AUFS
Injection : 7 μL (0.25 mg/mL)

トコフェロール

Tocopherols

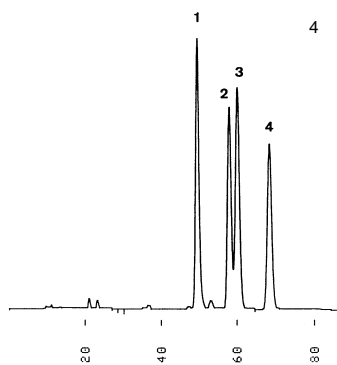
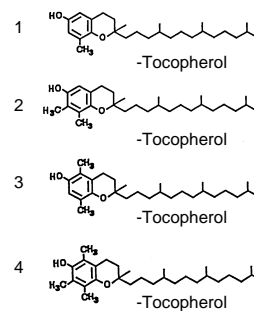


(S930726A)

Column : J'sphere ODS-M80 (4 μm, 8nm)
250 × 4.6 mm I.D.
Eluent : 2-propanol/water (68/32)
Flow rate : 0.5 mL/min
Temperature : 30
Detection : UV at 295 nm, 0.032 AUFS
Injection : 7 μL (0.25 mg/mL)

トコフェロール

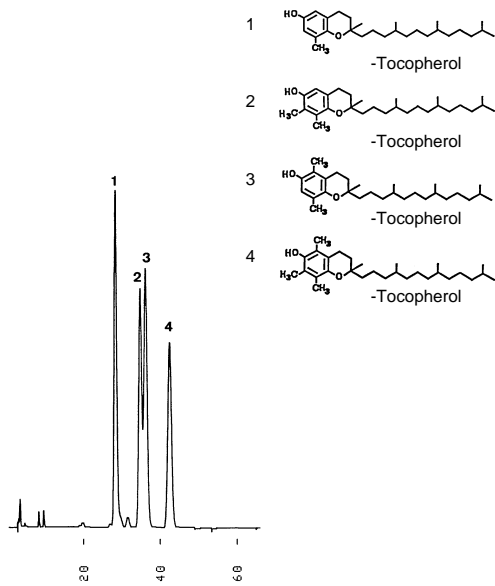
Tocopherols



(S921217A)

Column : YMC-Pack ODS-A (5 μm, 12nm)
250 × 4.6 mm I.D.
Eluent : 2-propanol/water (75/25)
Flow rate : 0.3 mL/min
Temperature : 30
Detection : UV at 295 nm, 0.08 AUFS
Injection : 7 μL (0.25 mg/mL)
Ref.) Y.Satomura, M. Kimura and Y. Itokawa, J.Chromatogr., 625, 372-376 (1992)

トコフェロール
Tocopherols

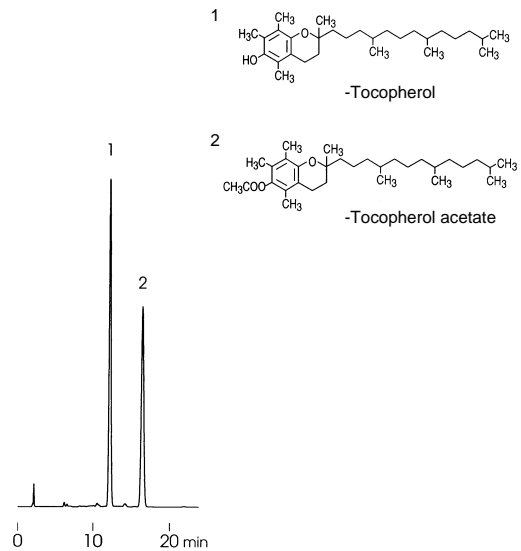


(S921216C)

Column : YMC-Pack ODS-A (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : 2-propanol/water (65/35)
Flow rate : 0.7 mL/min
Temperature : 30
Detection : UV at 295 nm, 0.04 AUFS
Injection : 7 μ L (0.25 mg/mL)

Ref.) Y.Satomura, M. Kimura and Y. Itokawa, J.Chromatogr., 625, 372-376 (1992)

トコフェロールおよび酢酸トコフェロール
Tocopherol and tocopherol acetate

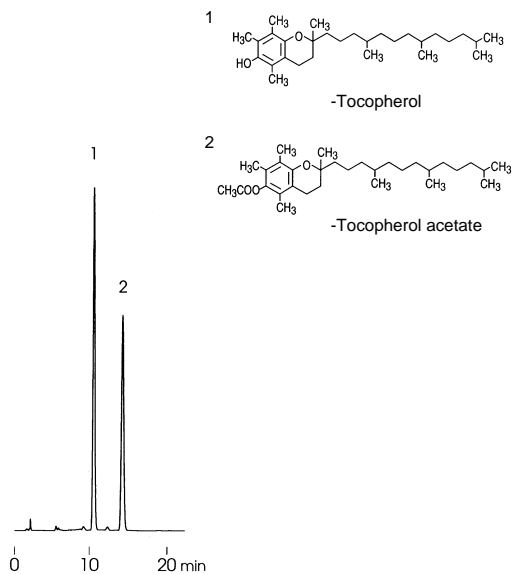


(S970426E)

Column : YMC-Pack Pro C18 (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : methanol/water (98/2)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 284 nm, 0.51 AUFS
Injection : 20 μ L (1 mg/mL)

(日本薬局方第13改正記載条件)

トコフェロールおよび酢酸トコフェロール
Tocopherol and tocopherol acetate

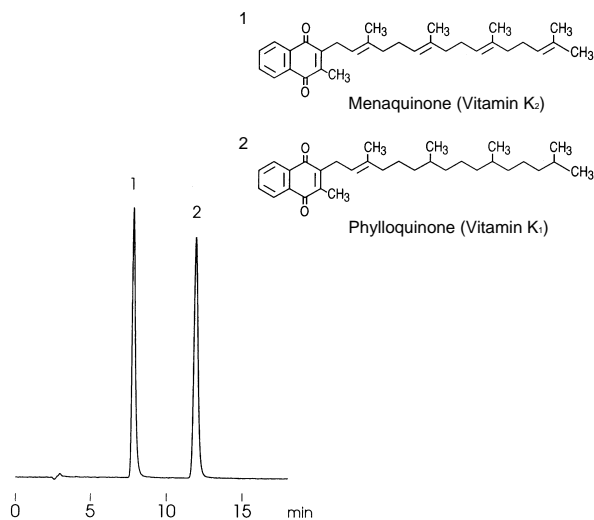


(S970426C)

Column : YMC-Pack ODS-A (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : methanol/water (98/2)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 284 nm, 0.51 AUFS
Injection : 20 μ L (1 mg/mL)

(日本薬局方第13改正記載条件)

ビタミン K
Vitamin K



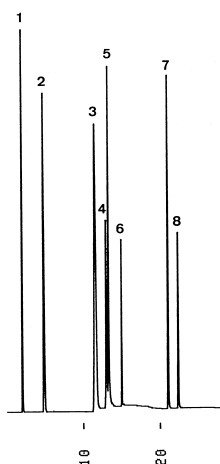
(A970728B)

Column : YMC-Pack Pro C18 (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : methanol/ethanol (5/1)
Flow rate : 0.8 mL/min
Temperature : 40
Detection : FLS at Ex 320 nm, Em 430 nm
reduction column (platinum black, 10 x 4.0 mm I.D.)
Injection : 20 μ L (100 ng/mL)

水溶性ビタミン

Water-soluble vitamins

1. L-Ascorbic acid (Vitamin C)
2. Nicotinic acid
3. Pyridoxine HCl (Vitamin B₆)
4. Nicotinamide
5. Thiamine HCl (Vitamin B₁)
6. Folic acid
7. Cyanocobalamin (Vitamin B₁₂)
8. Riboflavin (Vitamin B₂)



(G910415A)

Column : YMC-Pack ODS-A (5 μm, 12nm)
150 × 4.6 mm I.D.

Eluent : A)20mM KH₂PO₄ - K₂HPO₄ (pH 6.6)
B)20mM KH₂PO₄ - K₂HPO₄ (pH 6.6)/acetonitrile (80/20)
0%B (0-5min), 0-100%B (5-20min, linear), 100%B (20-25min)

Flow rate : 1.0 mL/min

Temperature : 30

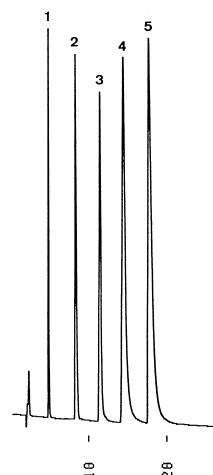
Detection : UV at 254 nm, 0.32 AUFS

Injection : 10 μL (0.04 ~ 0.31 mg/mL)

水溶性ビタミン

Water-soluble vitamins

1. Nicotinic acid
2. Pantothenic acid (Na salt)
3. Pyridoxine HCl (Vitamin B₆)
4. Nicotinamide
5. Thiamine HCl (Vitamin B₁)



(G9105230)

Column : YMC-Pack ODS-AM (5 μm, 12nm)
150 × 4.6 mm I.D.

Eluent : 20mM NaH₂PO₄ - Na₂HPO₄ (pH 6.5)

Flow rate : 1.0 mL/min

Temperature : 30

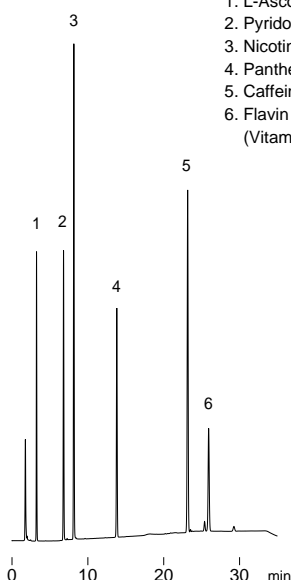
Detection : UV at 210 nm, 0.08 AUFS

Injection : 5 μL (0.02 ~ 0.58 mg/mL)

水溶性ビタミン

Water-soluble vitamins

1. L-Ascorbic acid (Vitamin C)
2. Pyridoxine HCl (Vitamin B₆)
3. Nicotinamide
4. Panthenol
5. Caffeine
6. Flavin mononucleotide sodium salt (Vitamin B₂)



(F001004B)

Column : Hydrosphere C18 (5 μm, 12nm)
150 × 4.6 mm I.D.

Eluent : A)50mM KH₂PO₄-H₃PO₄(pH3.5)
B)50mM KH₂PO₄-H₃PO₄(pH3.5)/acetonitrile (80/20)
0-60%B(0-20min), 60%B(20-30min)

Flow rate : 1.0 mL/min

Temperature : 30

Detection : UV at 210 nm, 0.32AUFS

Injection : 5 μL (0.05 ~ 0.40 mg/mL)

市販ドリンク剤中の水溶性ビタミン

A drink including vitamins

1. L-Ascorbic acid (Vitamin C)
2. Pyridoxine HCl (Vitamin B₆)
3. Nicotinamide
4. Panthenol
5. Caffeine
6. Flavin mononucleotide sodium salt (Vitamin B₂)



(F001004A)

Column : Hydrosphere C18 (5 μm, 12nm)
150 × 4.6 mm I.D.

Eluent : A)50mM KH₂PO₄-H₃PO₄(pH3.5)
B)50mM KH₂PO₄-H₃PO₄(pH3.5)/acetonitrile (80/20)
0-60%B(0-20min), 60%B(20-30min)

Flow rate : 1.0 mL/min

Temperature : 30

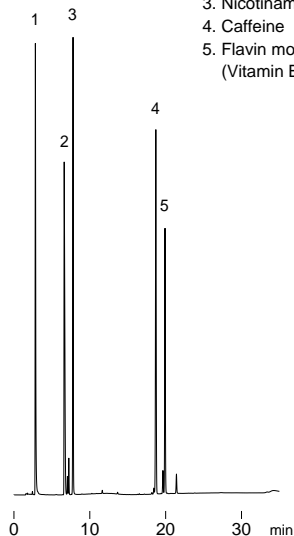
Detection : UV at 210 nm, 0.32AUFS

Injection : 5 μL

Sample : 5 times dilution with 5% metaphosphoric acid

水溶性ビタミン Water-soluble vitamins

1. Thiamine HCl (Vitamin B₁)
2. Pyridoxine HCl (Vitamin B₆)
3. Nicotinamide
4. Caffeine
5. Flavin mononucleotide sodium salt (Vitamin B₂)

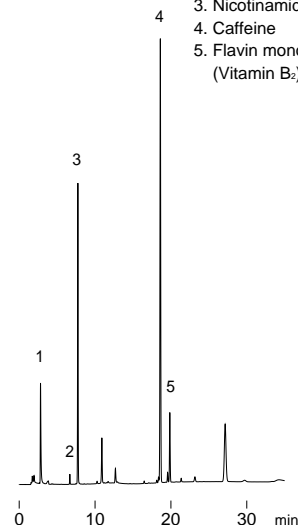


(F001011A)

Column : Hydrosphere C18 (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : A)50mM KH₂PO₄-H₃PO₄(pH3.5)
B)50mM KH₂PO₄-H₃PO₄(pH3.5)/acetonitrile (80/20)
0-90%B(0-20min), 90%B(20-30min)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 254 nm, 0.32AUFS
Injection : 15 μ L (0.04 ~ 0.60 mg/mL)

市販ドリンク剤中の水溶性ビタミン A drink including vitamins

1. Thiamine HCl (Vitamin B₁)
2. Pyridoxine HCl (Vitamin B₆)
3. Nicotinamide
4. Caffeine
5. Flavin mononucleotide sodium salt (Vitamin B₂)

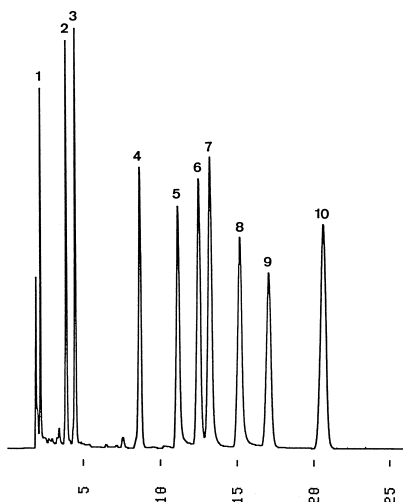


(F001011B)

Column : Hydrosphere C18 (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : A)50mM KH₂PO₄-H₃PO₄(pH3.5)
B)50mM KH₂PO₄-H₃PO₄(pH3.5)/acetonitrile (80/20)
0-90%B(0-20min), 90%B(20-30min)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 254 nm, 0.32AUFS
Injection : 15 μ L
Sample : 5 times dilution with water

水溶性ビタミン Water-soluble vitamins

1. *p*-Aminobenzoic acid (PABA)
2. Biotin (Vitamin H)
3. Riboflavin (Vitamin B₂)
4. Cyanocobalamin (Vitamin B₁₂)

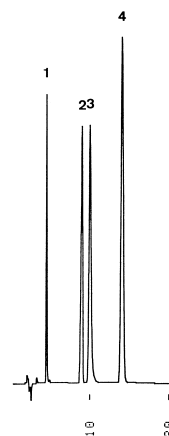


(M920212B)

Column : YMC-Pack Ph (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : acetonitrile/50mM NH₄H₂PO₄ (10/90)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 210 nm, 0.16 AUFS
Injection : 10 μ L (0.02 ~ 0.30 mg/mL)

水溶性ビタミン Water-soluble vitamins

1. *p*-Aminobenzoic acid (PABA)
2. Biotin (Vitamin H)
3. Cyanocobalamin (Vitamin B₁₂)
4. Riboflavin (Vitamin B₂)



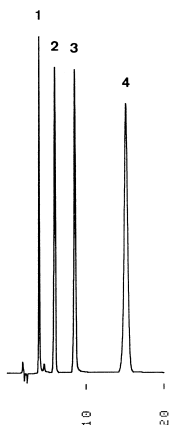
(M920212A)

Column : YMC-Pack ODS-AM (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : acetonitrile/50mM NH₄H₂PO₄ (10/90)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 210 nm, 0.16 AUFS
Injection : 10 μ L (0.02 ~ 0.30 mg/mL)

水溶性ビタミン

Water-soluble vitamins

1. *p*-Aminobenzoic acid (PABA)
2. Biotin (Vitamin H)
3. Riboflavin (Vitamin B₂)
4. Cyanocobalamin (Vitamin B₁₂)



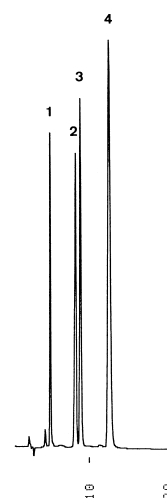
(M920212C)

Column : YMC-Pack TMS (5 μm, 12nm)
 150 × 4.6 mm I.D.
 Eluent : acetonitrile/50mM NH₄H₂PO₄ (10/90)
 Flow rate : 1.0 mL/min
 Temperature : 37
 Detection : UV at 210 nm, 0.16 AUFS
 Injection : 10 μL (0.02 ~ 0.30 mg/mL)

水溶性ビタミン

Water-soluble vitamins

1. *p*-Aminobenzoic acid (PABA)
2. Biotin (Vitamin H)
3. Riboflavin (Vitamin B₂)
4. Cyanocobalamin (Vitamin B₁₂)



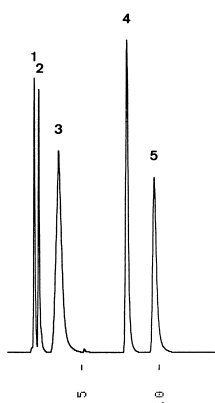
(M920212D)

Column : YMC-Pack C₈ (5 μm, 12nm)
 150 × 4.6 mm I.D.
 Eluent : acetonitrile/50mM NH₄H₂PO₄ (10/90)
 Flow rate : 1.0 mL/min
 Temperature : 37
 Detection : UV at 210 nm, 0.16 AUFS
 Injection : 10 μL (0.02 ~ 0.30 mg/mL)

水溶性ビタミン

Water-soluble vitamins

1. L-Ascorbic acid (Vitamin C)
2. Orotic acid (Vitamin B₁₃)
3. Pyrroloquinoline quinone (PQQ)
4. Pyridoxine HCl (Vitamin B₆)
5. Nicotinamide



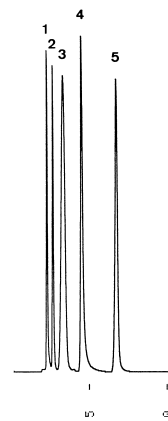
(M920207B)

Column : YMC-Pack ODS-AM (5 μm, 12nm)
 150 × 4.6 mm I.D.
 Eluent : 100mM CH₃COOH/100mM CH₃COONH₄ (30/70, pH 5.1)
 Flow rate : 1.0 mL/min
 Temperature : 37
 Detection : UV at 254 nm, 0.16 AUFS
 Injection : 10 μL (0.04 ~ 0.20 mg/mL)

水溶性ビタミン

Water-soluble vitamins

1. L-Ascorbic acid (Vitamin C)
2. Orotic acid (Vitamin B₁₃)
3. Pyrroloquinoline quinone (PQQ)
4. Pyridoxine HCl (Vitamin B₆)
5. Nicotinamide

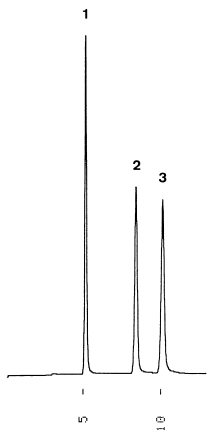


(M920207A)

Column : YMC-Pack TMS (5 μm, 12nm)
 150 × 4.6 mm I.D.
 Eluent : 100mM CH₃COOH/100mM CH₃COONH₄ (30/70, pH 5.1)
 Flow rate : 1.0 mL/min
 Temperature : 37
 Detection : UV at 254 nm, 0.16 AUFS
 Injection : 10 μL (0.04 ~ 0.20 mg/mL)

水溶性ビタミン Water-soluble vitamins

1. Nicotinic acid
2. Erythorbic acid
3. L-Ascorbic acid

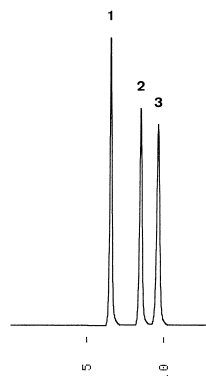


(T920525A)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : acetonitrile/50mM NH₄H₂PO₄ (70/30)
Flow rate : 1.0 mL/min
Temperature : 40
Detection : UV at 250 nm, 0.16 AUFS
Injection : 10 μL (0.05 ~ 0.1 mg/mL)

水溶性ビタミン Water-soluble vitamins

1. Nicotinic acid
2. Erythorbic acid
3. L-Ascorbic acid

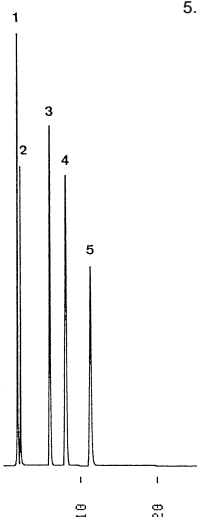


(T920525B)

Column : YMC-Pack NH₂ (5 μm, 12nm)
250 × 4.6 mm I.D.
Eluent : acetonitrile/50mM NH₄H₂PO₄ (70/30)
Flow rate : 1.0 mL/min
Temperature : 40
Detection : UV at 250 nm, 0.16 AUFS
Injection : 10 μL (0.05 ~ 0.1 mg/mL)

水溶性ビタミン Water-soluble vitamins

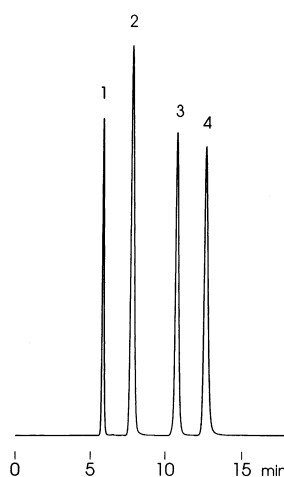
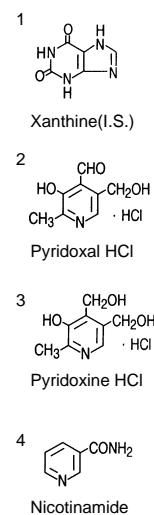
1. Pyridoxine HCl
2. Nicotinamide
3. Benfotiamine
4. Cyanocobalamin
5. Riboflavin



(S930712E)

Column : J'sphere ODS-H80 (4 μm, 8nm)
150 × 4.6 mm I.D.
Eluent : acetonitrile/50mM (NH₄)₂HPO₄ (10/90)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 254 nm, 0.13 AUFS
Injection : 5 μL (0.04 ~ 0.48 mg/mL)

水溶性ビタミン Water-soluble vitamins

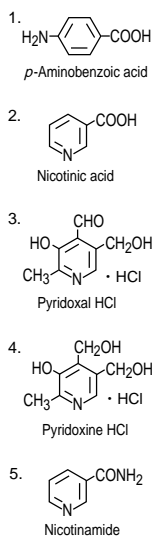
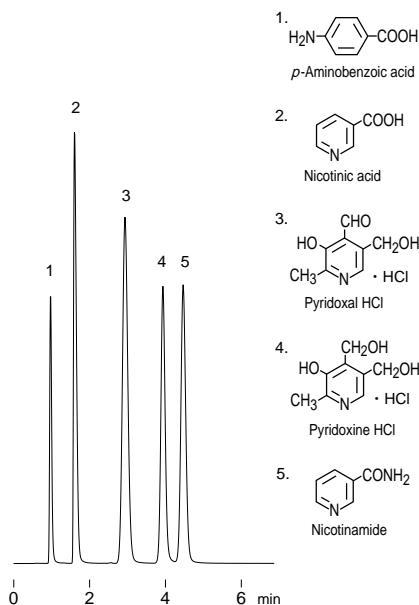


(S960912B)

Column : YMC-Pack Pro C18 (5 μm, 12nm)
150 × 4.6 mm I.D.
Eluent : 20mM KH₂PO₄ - K₂HPO₄ (pH 6.9)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 254 nm, 0.13 AUFS
Injection : 5 μL (0.05 ~ 0.2 mg/mL)

水溶性ビタミン

Water-soluble vitamins

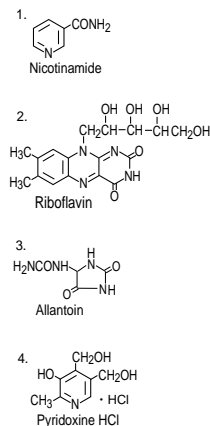
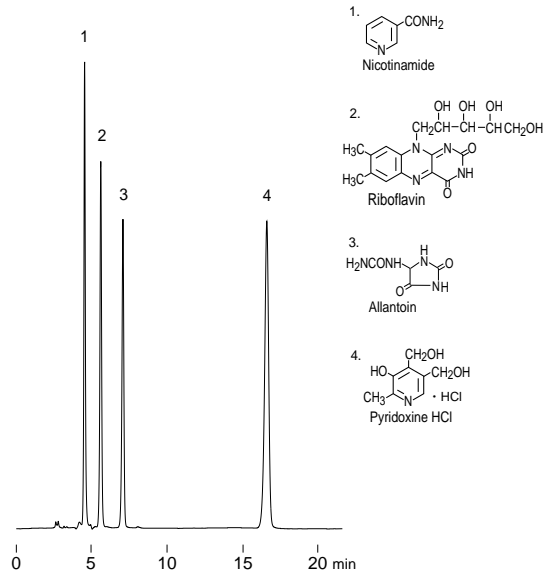


(S010125A)

Column : Hydrosphere C18 (3 μ m, 12nm)
50 \times 2.0 mm I.D.
Eluent : 10mM CH₃COONH₄
Flow rate : 0.2 mL/min
Temperature : 37
Detection : UV at 254 nm, 0.128 AUFS
Injection : 2 μ L (0.01 ~ 0.1 mg/mL)

アラントインおよび水溶性ビタミン

Allantoin and water-soluble vitamins

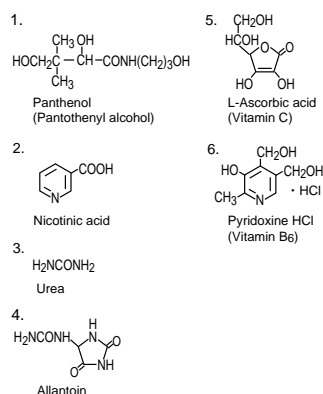
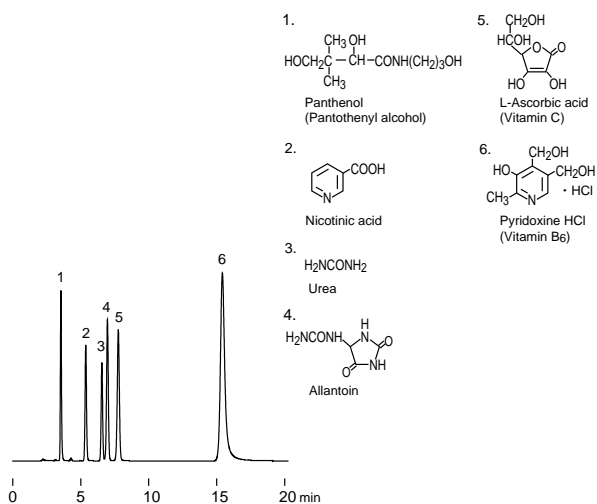


(S971121D)

Column : YMC-Pack NH₂ (5 μ m, 12nm)
250 \times 4.6 mm I.D.
Eluent : 50mM NH₄H₂PO₄ - H₃PO₄ (pH 2.5) / acetonitrile (20/80)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 210 nm, 0.064 AUFS
Injection : 8 μ L (0.01 ~ 0.04 mg/mL)

尿素、アラントインおよび水溶性ビタミン

Urea, allantoin and water-soluble vitamins

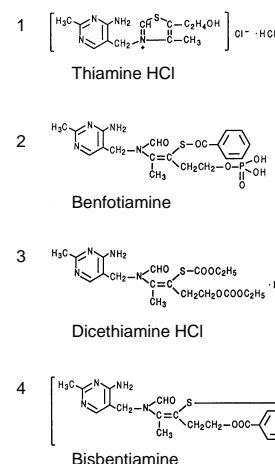
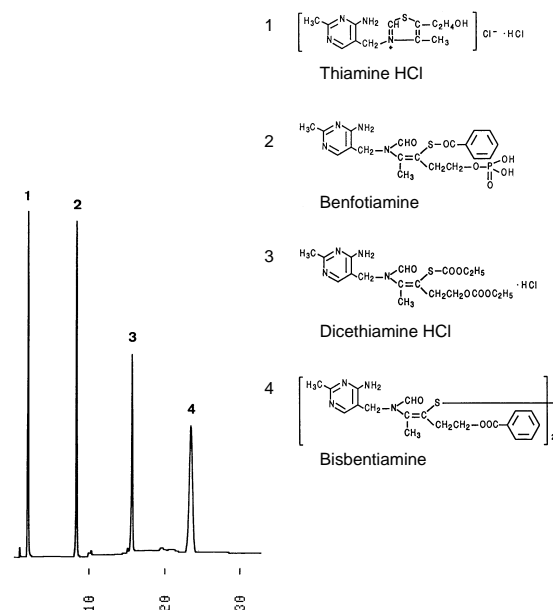


(J030624B)

Column : YMC-Pack Polyamine II
250 \times 4.6 mm I.D.
Eluent : 50mM NH₄H₂PO₄-H₃PO₄ (pH2.8)/acetonitrile (20/80)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 210 nm, 0.16 AUFS
Injection : 10 μ L (0.01 ~ 5.0 mg/mL)

ビタミンB₁誘導体

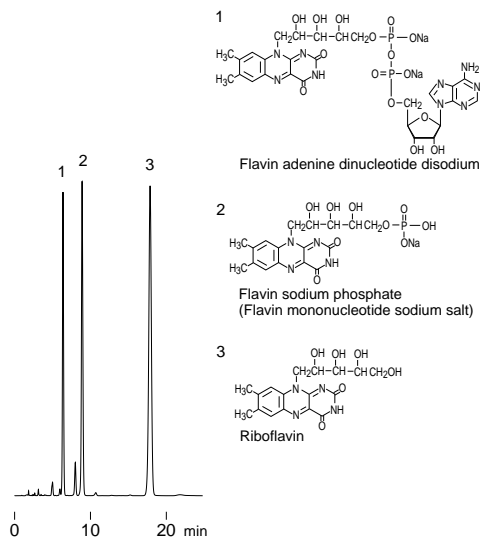
Thiamine and its modified compounds



(S940202D)

Column : J'sphere ODS-H80 (4 μ m, 8nm)
75 \times 4.6 mm I.D.
Eluent : A)50mM (NH₄)₂HPO₄
B)methanol/50mM (NH₄)₂HPO₄ (60/40)
10-100%B (0-15min, linear), 100%B (15-30min)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 260 nm, 0.26 AUFS
Injection : 10 μ L (0.1 ~ 0.2 mg/mL)

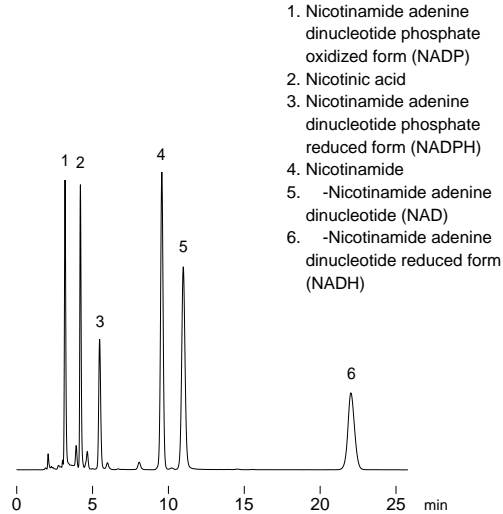
リボフラビンおよび関連化合物 Riboflavin and related compounds



(S000803B)

Column : Hydrosphere C18 (5 μm, 12nm)
150 × 4.6 mm I.D.
Eluent : 50mM KH₂PO₄ - K₂HPO₄ (pH 5.9) / acetonitrile (90/10)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 260 nm, 0.32 AUFS
Injection : 10 μL (0.1 mg/mL)

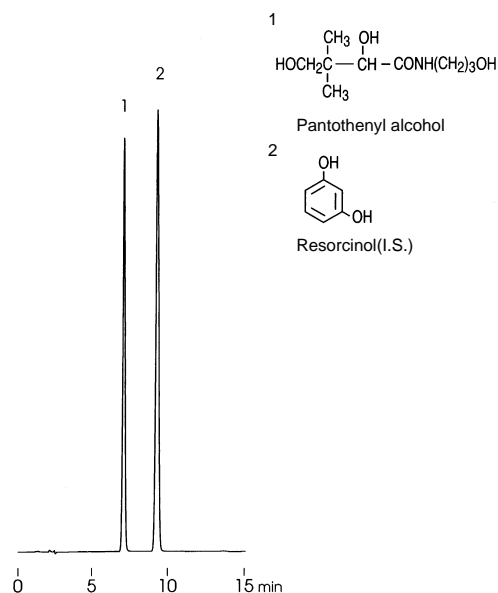
ニコチン酸誘導体 Nicotinic acid and derivatives



(F000707B)

Column : Hydrosphere C18 (5 μm, 12nm)
150 × 4.6 mm I.D.
Eluent : 20mM KH₂PO₄-K₂HPO₄(pH6.9)/acetonitrile (99/1)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 260 nm, 0.13 AUFS
Injection : 6 μL (0.05 ~ 0.10 mg/mL)

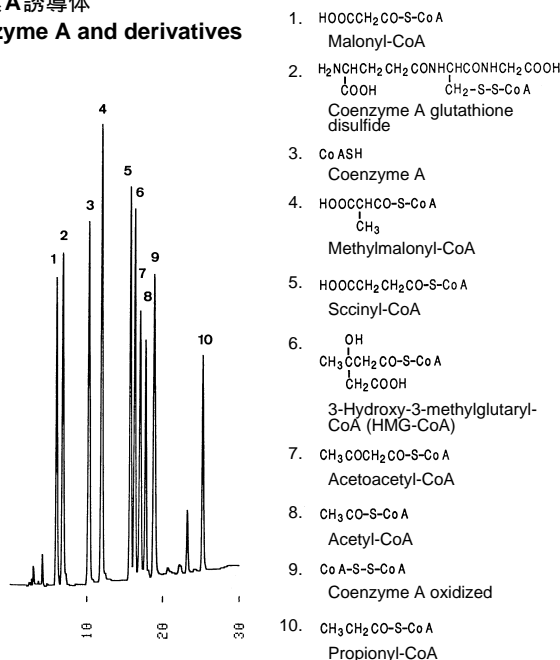
パントテニルアルコール Pantothenyl alcohol



(S961119B)

Column : YMC-Pack Pro C18 (5 μm, 12nm)
150 × 4.6 mm I.D.
Eluent : acetonitrile/water (5/95)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 210 nm, 0.13 AUFS
Injection : 5 μL (0.05 ~ 0.4 mg/mL)

補酵素A誘導体 Coenzyme A and derivatives



Courtesy of Dr. Takamura, Ibaraki University

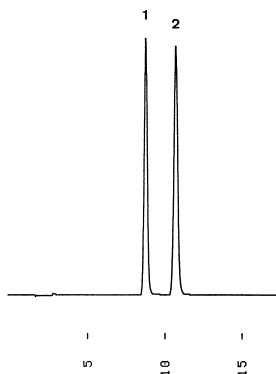
(S940630E)

Column : J'sphere ODS-M80 (4 μm, 8nm)
150 × 4.6 mm I.D.
Eluent : A)methanol/50mM KH₂PO₄ (10/90)
B)methanol/50mM KH₂PO₄ (30/70)
10%B (0-5min), 10-100%B (5-30min)
Flow rate : 0.7 mL/min
Temperature : 37
Detection : UV at 260 nm, 0.016 AUFS
Injection : 10 μL (16.7 nmol/mL)

L-アスコルビン酸及びエリソルビン酸

L-Ascorbic acid and erythorbic acid

1. Erythorbic acid
2. L-Ascorbic acid (Vitamin C)



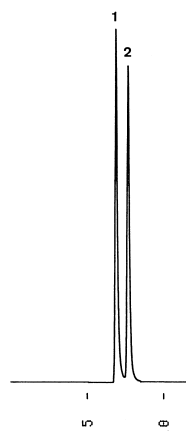
(T910425A)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : acetonitrile/50mM NH₄H₂PO₄ (70/30)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 250 nm, 0.16 AUFS
Injection : 10 μL (0.1 mg/mL)

L-アスコルビン酸及びエリソルビン酸

L-Ascorbic acid and erythorbic acid

1. L-Ascorbic acid (Vitamin C)
2. Erythorbic acid



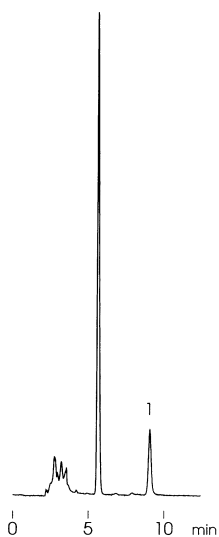
(G910523N)

Column : YMC-Pack ODS-AM (5 μm, 12nm)
150 × 4.6 mm I.D.
Eluent : 20mM CH₃COONH₄ in 5mM tetrabutylammonium bromide
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 250 nm, 0.08 AUFS
Injection : 5 μL (0.05 mg/mL)

L-アスコルビン酸の2,4-DNPH誘導体

2,4-Dinitrophenylhydrazone of L-ascorbic acid

1. L-Ascorbic acid 2,4-DNPH

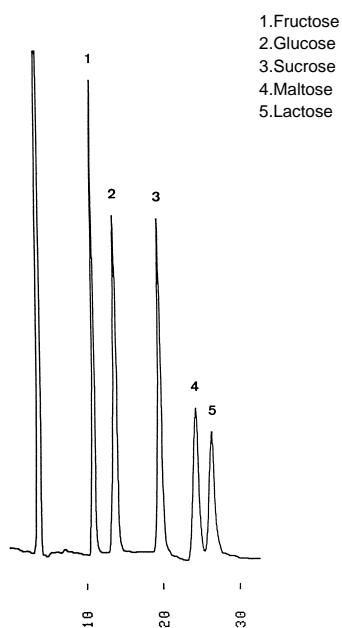


(C970808K)

Column : YMC-Pack SIL (5 μm, 12nm)
150 × 6.0 mm I.D.
Eluent : hexane/ethyl acetate/2-propanol/acetic acid (40/30/2/1)
Flow rate : 1.5 mL/min
Temperature : 35
Detection : VIS at 540 nm, 0.01 AUFS
Injection : 20 μL (10 μg/mL)

単糖及び二糖類

Monosaccharides and disaccharides

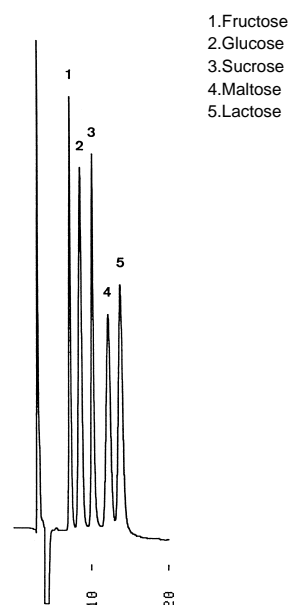


(T910726A)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : acetonitrile/water (75/25)
Flow rate : 1.0 mL/min
Temperature : 26
Detection : RI, 32 × 10⁻⁶ RIU/FS
Injection : 5 μL (14.3 ~ 28.6 mg/mL)

単糖及び二糖類

Monosaccharides and disaccharides

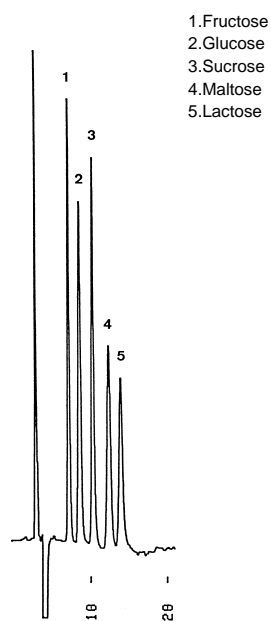


(T910723A)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : ethanol/ethyl acetate/acetonitrile/water (30/40/5/25)
Flow rate : 1.0 mL/min
Temperature : 26
Detection : RI, 32 × 10⁻⁶ RIU/FS
Injection : 5 μL (14.3 ~ 28.6 mg/mL)

単糖及び二糖類

Monosaccharides and disaccharides

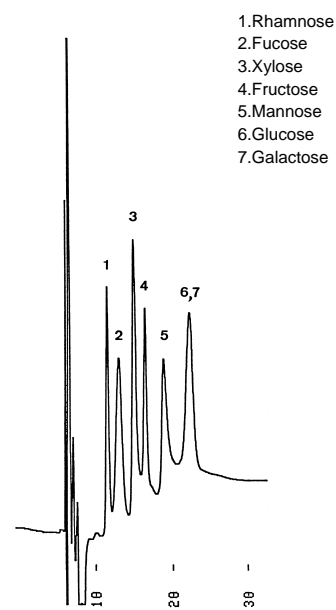


(T910718E)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : ethanol/ethyl acetate/acetonitrile/water (30/40/5/25)
Flow rate : 1.0 mL/min
Temperature : 35
Detection : RI, 32 × 10⁻⁶ RIU/FS
Injection : 5 μL (14.3 ~ 28.6 mg/mL)

単糖類

Monosaccharides

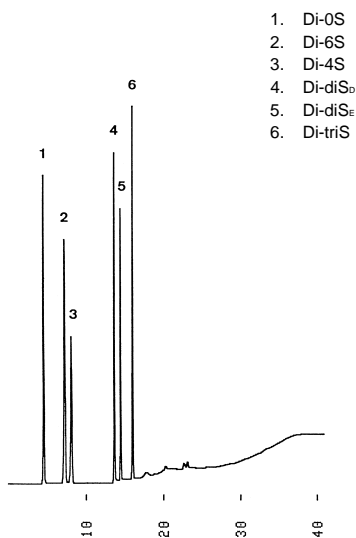


(T910718D)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D. × 2
Eluent : ethanol/ethyl acetate/acetonitrile/water (30/30/23/17)
Flow rate : 1.0 mL/min
Temperature : 26
Detection : RI, 16 × 10⁻⁶ RIU/FS
Injection : 25 μL (0.65 ~ 115.6 mg/mL)

不飽和コンドロニ糖

Unsaturated chondro-disaccharides



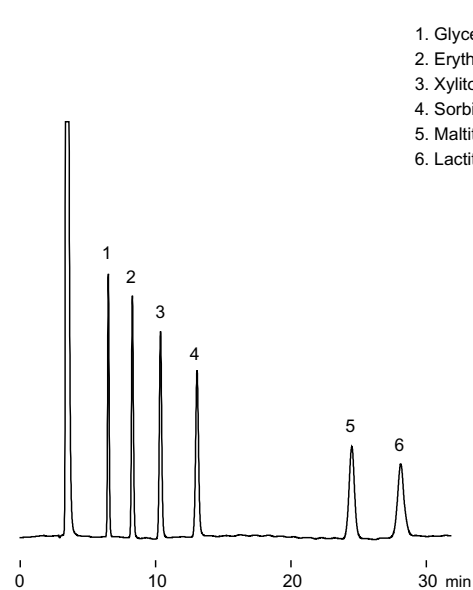
1. Di-OS
2. Di-6S
3. Di-4S
4. Di-diS_b
5. Di-diS_e
6. Di-triS

(T910920A)

Column : YMC-Pack NH₂ (5 μm, 12nm)
250 × 4.6 mm I.D.
Eluent : A) 0.01M NH₄H₂PO₄ - (NH₄)₂HPO₄ (pH 6.7)
B) 0.5M NH₄H₂PO₄ - (NH₄)₂HPO₄ (pH 6.7)
0%B (0-5min), 0-100%B (5-30min, linear), 100%B (30-40min)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 232 nm, 0.32 AUFS
Injection : 9 μL (0.12 ~ 0.24 mg/mL)

糖アルコール

Sugar alcohols



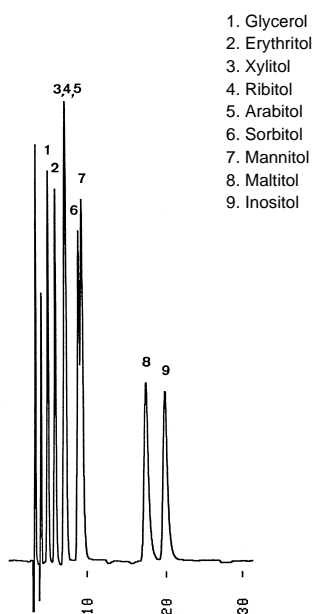
1. Glycerol
2. Erythritol
3. Xylitol
4. Sorbitol
5. Maltitol
6. Lactitol

(F030603A)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : acetonitrile/water (75/25)
Flow rate : 1.0 mL/min
Temperature : 25
Detection : RI, 32 × 10⁶ RIU/FS
Injection : 5 μL (5.0 mg/mL)

糖アルコール

Sugar alcohols



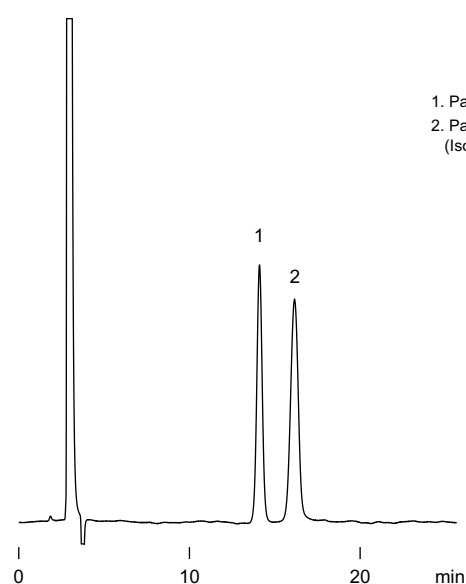
1. Glycerol
2. Erythritol
3. Xylitol
4. Ribitol
5. Arabitol
6. Sorbitol
7. Mannitol
8. Maltitol
9. Inositol

(T910718B)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : ethanol/ethyl acetate/acetonitrile/water (30/30/25/15)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : RI, 32 × 10⁶ RIU/FS
Injection : 15 μL (1.7 ~ 3.3 mg/mL)

パラチノースとパラチニット

Palatinose and Palatinin



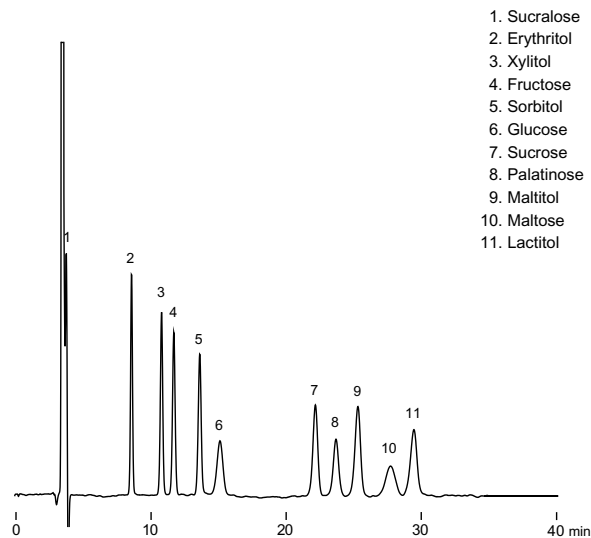
1. Palatinose
2. Palatinin (*)
(Isomalt)

(*) Mixture of 6-O-β-D-Glucopyranosyl-D-sorbitol
and 1-O-β-D-Glucopyranosyl-D-mannitol

(F030616B)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : acetonitrile/water (70/30)
Flow rate : 1.0 mL/min
Temperature : 25
Detection : RI, 64 × 10⁶ RIU/FS
Injection : 15 μL (5.0 mg/mL)

糖類および甘味料の一斉分析 Sugars and sweeteners

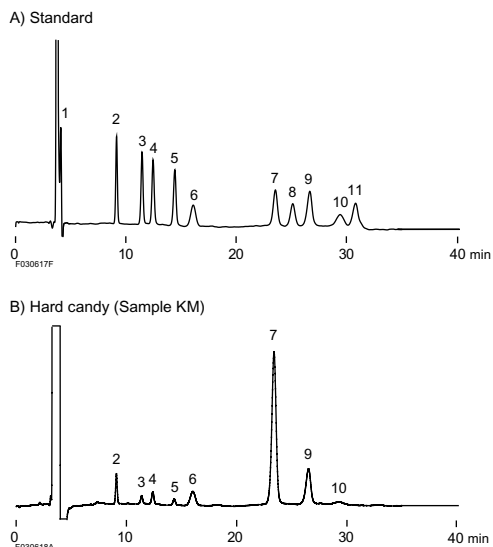


1. Sucralose
2. Erythritol
3. Xylitol
4. Fructose
5. Sorbitol
6. Glucose
7. Sucrose
8. Palatinose
9. Maltitol
10. Maltose
11. Lactitol

(F030613C)

Column : YMC-Pack Polyamine II
 250 × 4.6 mm I.D.
 Eluent : acetonitrile/water (75/25)
 Flow rate : 1.0 mL/min
 Temperature : 25
 Detection : RI, 32 × 10⁻⁸ RIU/FS
 Injection : 5 μ L (5.0 mg/mL)

市販キャンディー中の糖類 Sugars in hard candy

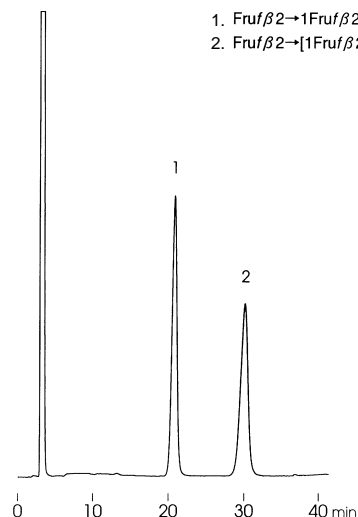


1. Sucralose
2. Erythritol
3. Xylitol
4. Fructose
5. Sorbitol
6. Glucose
7. Sucrose
8. Palatinose
9. Maltitol
10. Maltose
11. Lactitol

(F030618A)

Column : YMC-Pack Polyamine II
 250 × 4.6 mm I.D.
 Eluent : acetonitrile/water (75/25)
 Flow rate : 1.0 mL/min
 Temperature : 25
 Detection : RI, 32 × 10⁻⁸ RIU/FS
 Injection : 5 μ L
 Sample : A) 5 mg/mL
 B) 50 mg/mL (50% ethanol solution of candy)

オリゴ糖 Oligosaccharides

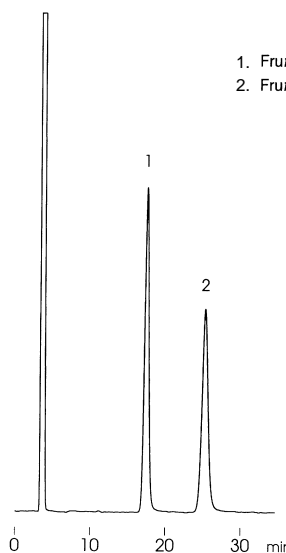


1. Frufβ2→1Frufβ2→1 α Glc (1-Kestose)
2. Frufβ2→[1Frufβ2]₂→1 α Glc (Nystose)

(A970625G)

Column : YMC-Pack Polyamine II
 250 × 4.6 mm I.D.
 Eluent : acetonitrile/water (70/30)
 Flow rate : 1.0 mL/min
 Temperature : ambient (26)
 Detection : RI, 32 × 10⁻⁸ RIU/FS
 Injection : 20 μ L (4.0 mg/mL)

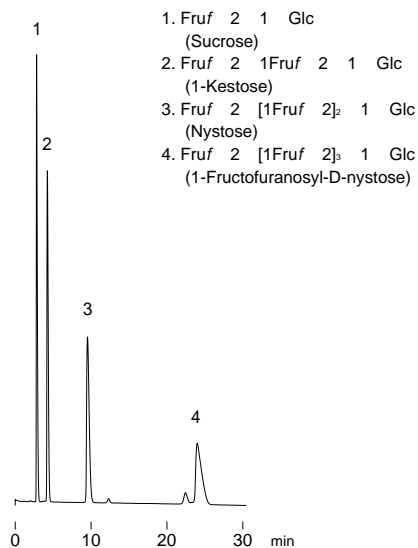
オリゴ糖 Oligosaccharides



1. Frufβ2→1Frufβ2→1 α Glc (1-Kestose)
2. Frufβ2→[1Frufβ2]₂→1 α Glc (Nystose)

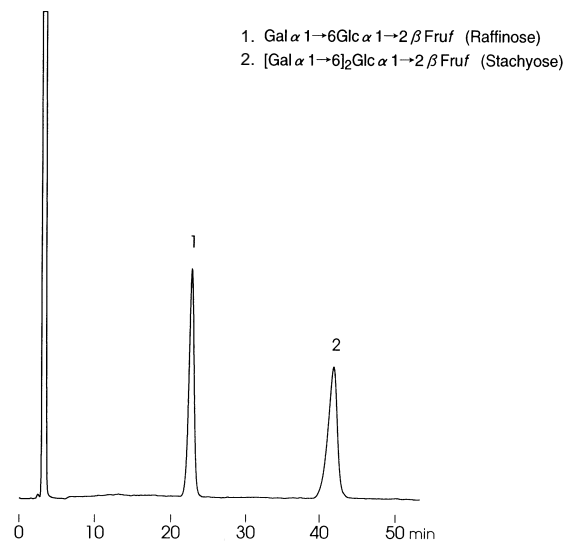
(A970701G)

Column : YMC-Pack NH₂ (5 μ m, 12nm)
 250 × 4.6 mm I.D.
 Eluent : acetonitrile/water (70/30)
 Flow rate : 1.0 mL/min
 Temperature : ambient (27)
 Detection : RI, 32 × 10⁻⁸ RIU/FS
 Injection : 20 μ L (4.0 mg/mL)

フルクトオリゴ糖
Fructooligosaccharides

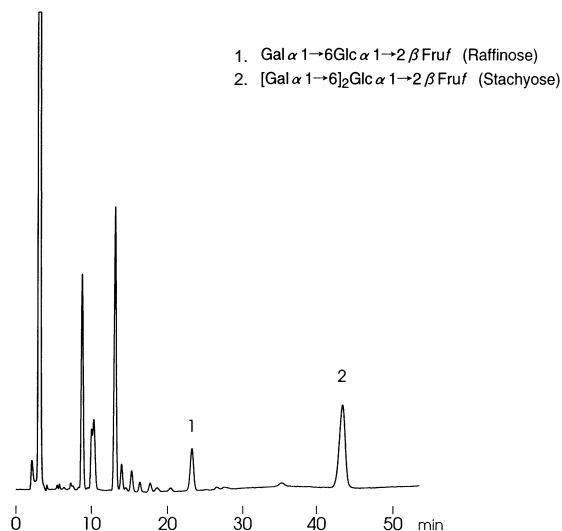
(F000725B)

Column : Hydrosphere C18 (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : 30
Detection : RI, 64 × 10⁻⁶ RIU/FS
Injection : 5 μ L (10 mg/mL)

オリゴ糖
Oligosaccharides

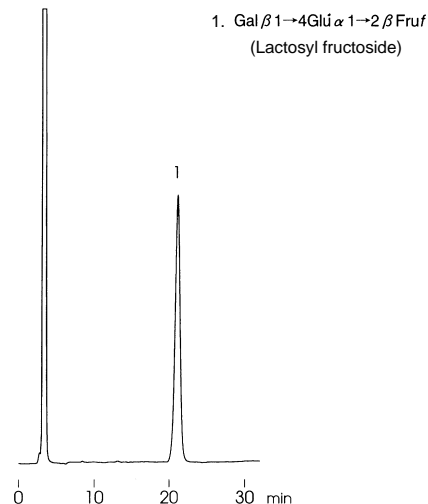
(A970627F)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : acetonitrile/water (70/30)
Flow rate : 1.0 mL/min
Temperature : ambient (26)
Detection : RI, 32 × 10⁻⁶ RIU/FS
Injection : 20 μ L (4.0 mg/mL)

市販清涼飲料水のオリゴ糖
Oligosaccharides of soft drink

(A970630C)

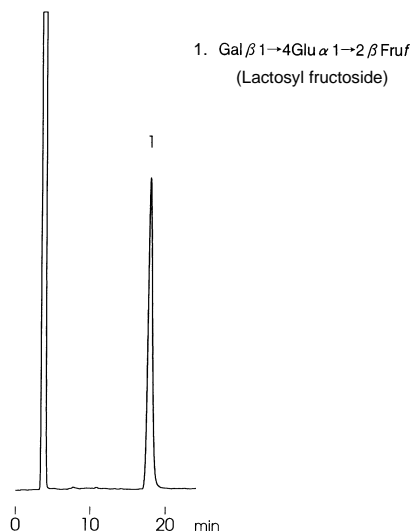
Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : acetonitrile/water (70/30)
Flow rate : 1.0 mL/min
Temperature : ambient (27)
Detection : RI, 32 × 10⁻⁶ RIU/FS
Injection : 10 μ L
Sample : 10 times dilution with water

オリゴ糖
Oligosaccharides

(A970628H)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : acetonitrile/water (70/30)
Flow rate : 1.0 mL/min
Temperature : ambient (26)
Detection : RI, 32 × 10⁻⁶ RIU/FS
Injection : 20 μ L (4.0 mg/mL)

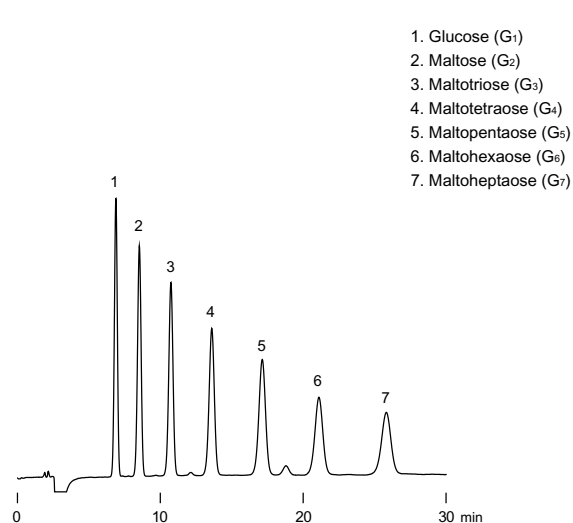
オリゴ糖 Oligosaccharides



(A970703A)

Column : YMC-Pack NH₂ (5 μ m, 12nm)
250 \times 4.6 mm I.D.
Eluent : acetonitrile/water (70/30)
Flow rate : 1.0 mL/min
Temperature : ambient (27)
Detection : RI, 32 \times 10⁻⁶ RIU/FS
Injection : 20 μ L (4.0 mg/mL)

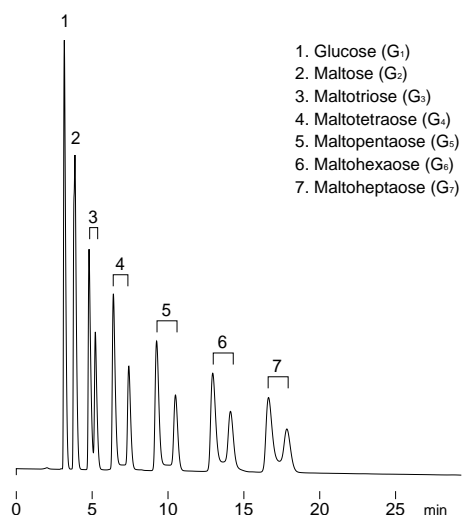
マルトオリゴ糖(G₁ ~ G₇) Maltooligosaccharides(G₁ ~ G₇)



(F030620A)

Column : YMC-Pack Polyamine II
250 \times 4.6 mm I.D.
Eluent : acetonitrile/water (60/40)
Flow rate : 1.0 mL/min
Temperature : 25
Detection : RI, 32 \times 10⁻⁶ RIU/FS
Injection : 10 μ L (2.4 mg/mL)

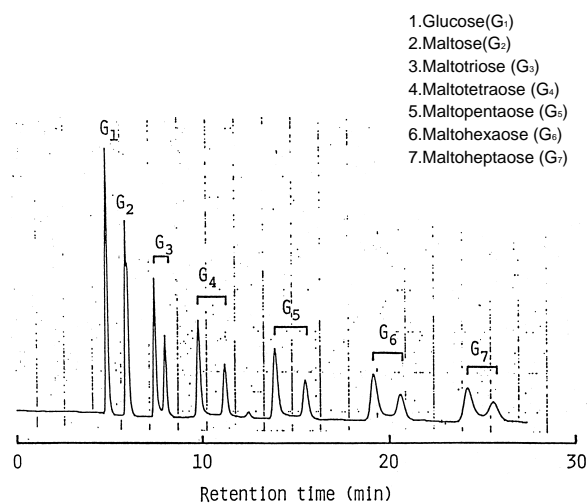
マルトオリゴ糖(G₁ ~ G₇) Maltooligosaccharides(G₁ ~ G₇)



(F000612D)

Column : Hydrosphere C18 (5 μ m, 12nm)
250 \times 4.6 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (26)
Detection : RI, 64 \times 10⁻⁶ RIU/FS
Injection : 10 μ L (5.0 mg/mL)

マルトオリゴ糖(G₁ ~ G₇) Maltooligosaccharides(G₁ ~ G₇)

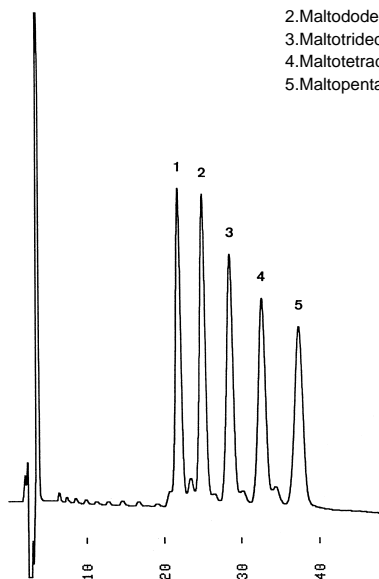


Courtesy of Dr. Kimura and Dr. Chiba, Hokkaido University, Japan (Y910501A)

Column : YMC-Pack ODS-AQ (5 μ m, 12nm)
250 \times 10.0 mm I.D.
Eluent : water
Flow rate : 3.0 mL/min
Temperature : ambient (25)
Detection : RI

マルトオリゴ糖($G_{11} \sim G_{15}$)Maltooligosaccharides($G_{11} \sim G_{15}$)

1. Maltoundecaose (G_{11})
2. Maltododecaose (G_{12})
3. Maltotridecaose (G_{13})
4. Maltotetraecaose (G_{14})
5. Maltopentadecaose (G_{15})

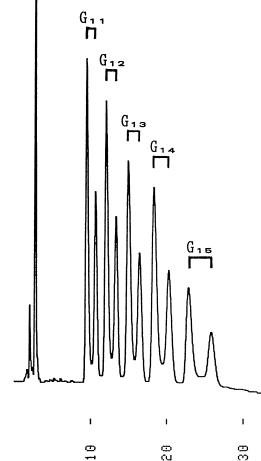


(T910718A)

Column : YMC-Pack Polyamine II
250 × 4.6 mm I.D.
Eluent : acetonitrile/water (55/45)
Flow rate : 1.0 mL/min
Temperature : 26
Detection : RI, 32×10^6 RIU/FS
Injection : 200 μ L (0.71 ~ 0.95 mg/mL)
Sample : Manufactured by Nakano Vinegar Co., Ltd.,
Nakano Central Research Institute

マルトオリゴ糖($G_{11} \sim G_{15}$)Maltooligosaccharides($G_{11} \sim G_{15}$)

1. Maltoundecaose (G_{11})
2. Maltododecaose (G_{12})
3. Maltotridecaose (G_{13})
4. Maltotetraecaose (G_{14})
5. Maltopentadecaose (G_{15})

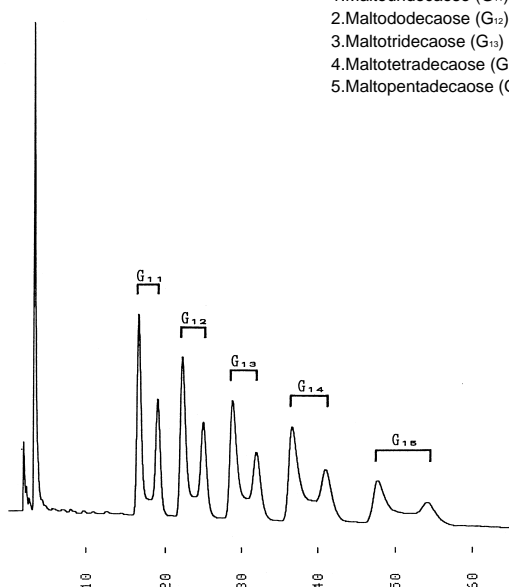


(M910604K)

Column : YMC-Pack ODS-A (5 μ m, 30nm)
150 × 4.6 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : 20
Detection : RI, 8×10^6 RIU/FS
Injection : 25 μ L (1 mg/mL)
Sample : Manufactured by Nakano Vinegar Co., Ltd.,
Nakano Central Research Institute

マルトオリゴ糖($G_{11} \sim G_{15}$)Maltooligosaccharides($G_{11} \sim G_{15}$)

1. Maltoundecaose (G_{11})
2. Maltododecaose (G_{12})
3. Maltotridecaose (G_{13})
4. Maltotetraecaose (G_{14})
5. Maltopentadecaose (G_{15})

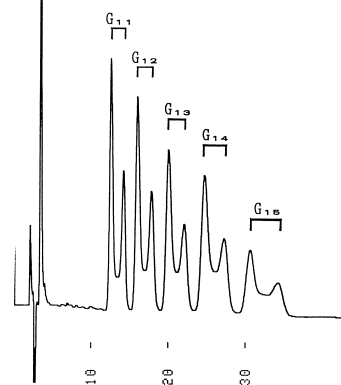


(M910604L)

Column : YMC-Pack ODS-A (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : 20
Detection : RI, 8×10^6 RIU/FS
Injection : 25 μ L (1 mg/mL)
Sample : Manufactured by Nakano Vinegar Co., Ltd.,
Nakano Central Research Institute

マルトオリゴ糖($G_{11} \sim G_{15}$)Maltooligosaccharides($G_{11} \sim G_{15}$)

1. Maltoundecaose (G_{11})
2. Maltododecaose (G_{12})
3. Maltotridecaose (G_{13})
4. Maltotetraecaose (G_{14})
5. Maltopentadecaose (G_{15})

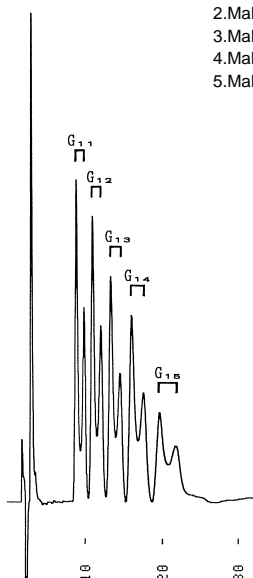


(M910604M)

Column : YMC-Pack ODS-AQ (5 μ m, 12nm)
150 × 4.6 mm I.D.
Eluent : methanol/water (5/995)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : RI, 8×10^6 RIU/FS
Injection : 25 μ L (1 mg/mL)
Sample : Manufactured by Nakano Vinegar Co., Ltd.,
Nakano Central Research Institute

マルトオリゴ糖(G₁₁ ~ G₁₅)
Maltooligosaccharides(G₁₁ ~ G₁₅)

1. Maltoundecaose (G₁₁)
2. Maltododecaose (G₁₂)
3. Maltotridecaose (G₁₃)
4. Maltotetraecaose (G₁₄)
5. Maltopentadecaose (G₁₅)

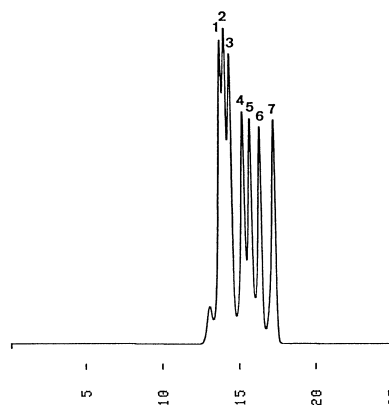


(M910604N)

Column : YMC-Pack ODS-A (5 μm, 12nm)
 150 × 4.6 mm I.D.
 Eluent : methanol/water (5/995)
 Flow rate : 1.0 mL/min
 Temperature : 37
 Detection : RI, 8 × 10⁶ RIU/FS
 Injection : 25 μL (1 mg/mL)
 Sample : Manufactured by Nakano Vinegar Co., Ltd.,
 Nakano Central Research Institute

マルトオリゴ糖(G₁ ~ G₁₅)
Maltooligosaccharides(G₁ ~ G₁₅)

1. Maltopentadecaose (G₁₅)
2. Maltotridecaose (G₁₃)
3. Maltoundecaose (G₁₁)
4. Maltoheptaose (G₇)
5. Maltopentaose (G₅)
6. Maltotriose (G₃)
7. Glucose (G₁)

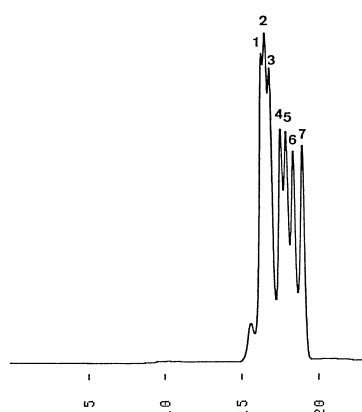


(G911216E)

Column : YMC-Pack Diol-60
 500 × 8.0 mm I.D.
 Eluent : water
 Flow rate : 1.0 mL/min
 Temperature : ambient (24)
 Detection : RI, 64 × 10⁶ RIU/FS
 Injection : 60 μL (0.60 ~ 0.75 mg/mL)

マルトオリゴ糖(G₁ ~ G₁₅)
Maltooligosaccharides(G₁ ~ G₁₅)

1. Maltopentadecaose (G₁₅)
2. Maltotridecaose (G₁₃)
3. Maltoundecaose (G₁₁)
4. Maltoheptaose (G₇)
5. Maltopentaose (G₅)
6. Maltotriose (G₃)
7. Glucose (G₁)

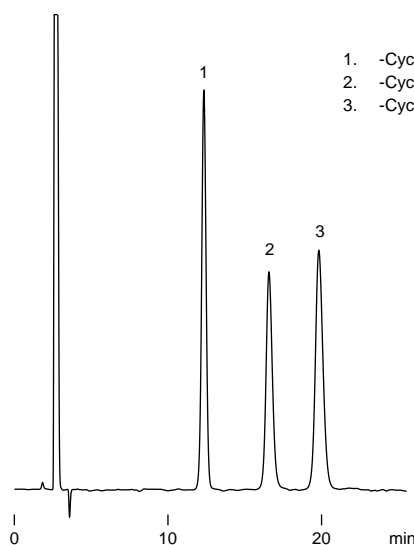


(G911216F)

Column : YMC-Pack Diol-120
 500 × 8.0 mm I.D.
 Eluent : water
 Flow rate : 1.0 mL/min
 Temperature : ambient (24)
 Detection : RI, 64 × 10⁶ RIU/FS
 Injection : 60 μL (0.60 ~ 0.75 mg/mL)

サイクロデキストリン
Cyclodextrins

1. -Cyclodextrin
2. -Cyclodextrin
3. -Cyclodextrin

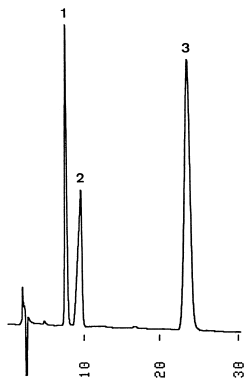


(F030617B)

Column : YMC-Pack Polyamine II
 250 × 4.6 mm I.D.
 Eluent : acetonitrile/water (60/40)
 Flow rate : 1.0 mL/min
 Temperature : 25
 Detection : RI, 32 × 10⁶ RIU/FS
 Injection : 10 μL (0.4 ~ 0.5 mg/mL)

サイクロデキストリン
Cyclodextrins

1. -Cyclodextrin
2. -Cyclodextrin
3. -Cyclodextrin

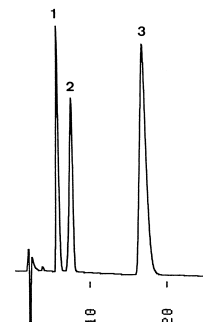


(M910417B)

Column : YMC-Pack ODS-AQ (5 μ m, 12nm)
150 \times 4.6 mm I.D.
Eluent : methanol/water (7/93)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : RI, 32 \times 10⁶ RIU/FS
Injection : 8 μ L (5 ~ 15 mg/mL)

サイクロデキストリン
Cyclodextrins

1. -Cyclodextrin
2. -Cyclodextrin
3. -Cyclodextrin

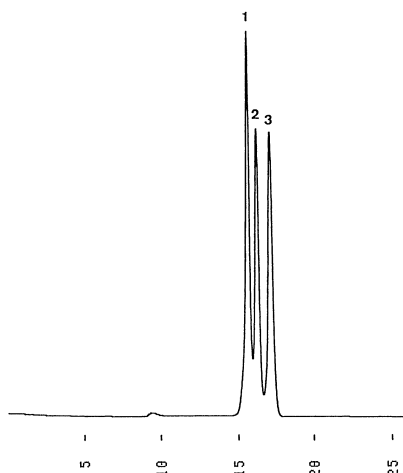


(M910417A)

Column : YMC-Pack ODS-A (5 μ m, 12nm)
150 \times 4.6 mm I.D.
Eluent : methanol/water (7/93)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : RI, 32 \times 10⁶ RIU/FS
Injection : 8 μ L (5 ~ 15 mg/mL)

サイクロデキストリン
Cyclodextrins

1. -Cyclodextrin
2. -Cyclodextrin
3. -Cyclodextrin

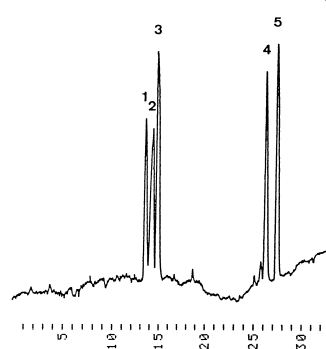


(G911216)

Column : YMC-Pack Diol-60
500 \times 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 32 \times 10⁶ RIU/FS
Injection : 30 μ L (1.67 mg/mL)

サイクロデキストリン
Cyclodextrins

1. -Cyclodextrin
2. -Cyclodextrin
3. -Cyclodextrin
4. O-Dimethyl- -cyclodextrin
5. O-Trimethyl- -cyclodextrin

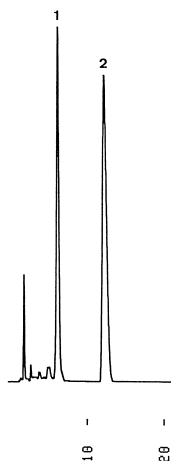


(M910423A)

Column : YMC-Pack ODS-A (5 μ m, 12nm)
150 \times 4.6 mm I.D.
Eluent : A)water
B)methanol
2%B (0-5min), 2-30%B (5-15min, linear),
30-100%B (15-20min, linear), 100%B (20-30min)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : Evaporative Mass Analyzer (ACS Ltd.)
Temp 150
Time Constant 5
PMT 3
Attenuation 16
Pressure 20 psi
Injection : 200 μ L (1.5 ~ 15 mg/mL)

サイクロデキストリン Cyclodextrins

1. O-Dimethyl- α -cyclodextrin
2. O-Trimethyl- α -cyclodextrin

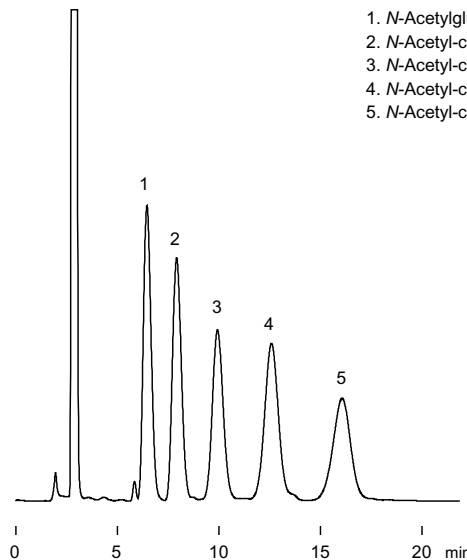


(M910417C)

Column : YMC-Pack ODS-A (5 μ m, 12nm)
150 x 4.6 mm I.D.
Eluent : methanol/water (80/20)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : RI, 32 x 10⁻⁶ RIU/FS
Injection : 5 μ L (15 ~ 20 mg/mL)

キチンオリゴ糖 N-Acetyl-chitooligosaccharides

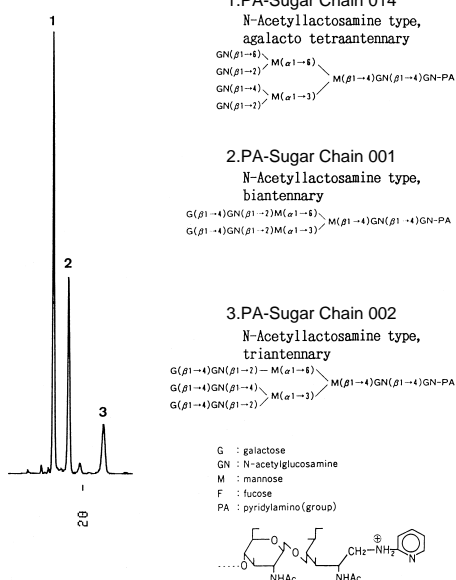
1. N-Acetylglucosamine
2. N-Acetylchitobiose
3. N-Acetylchitotriose
4. N-Acetylchitotetraose
5. N-Acetylchitopentaose



(F030601A)

Column : YMC-Pack Polyamine II
250 x 4.6 mm I.D.
Eluent : acetonitrile/water (65/35)
Flow rate : 1.0 mL/min
Temperature : 25
Detection : RI, 16 x 10⁻⁶ RIU/FS
Injection : 15 μ L (0.2 mg/mL)

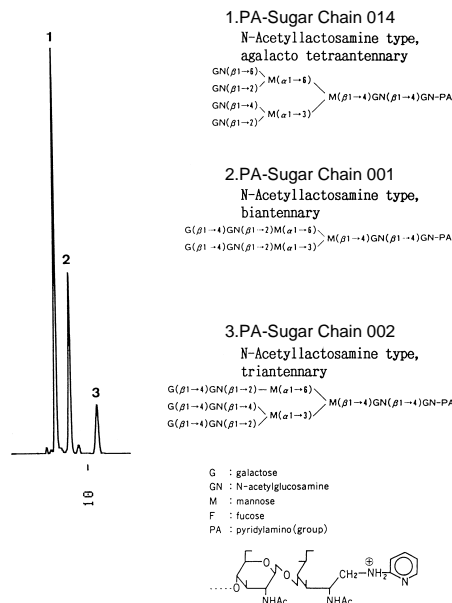
ピリジルアミノ化(PA)糖 Pyridylamino(PA)-Sugar chains



(G910607C)

Column : YMC-Pack ODS-AQ (5 μ m, 12nm)
150 x 4.6 mm I.D.
Eluent : methanol/20mM NH₄H₂PO₄ (5/95)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : FLS at Ex.320 nm, Em. 400 nm, 8 mV/FS
Injection : 2 μ L (3.3 pmol/mL)
Sample : PA-Sugar Chain Series, manufactured by TAKARA SHUZO CO., LTD.

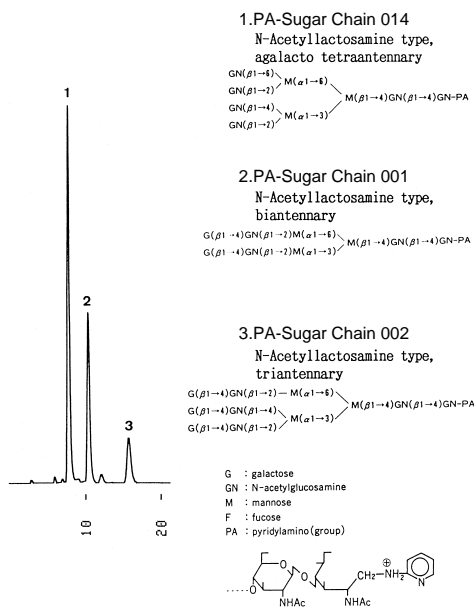
ピリジルアミノ化(PA)糖 Pyridylamino(PA)-Sugar chains



(G910607B)

Column : YMC-Pack ODS-A (5 μ m, 30nm)
150 x 4.6 mm I.D.
Eluent : methanol/20mM NH₄H₂PO₄ (5/95)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : FLS at Ex.320 nm, Em. 400 nm, 16 mV/FS
Injection : 2 μ L (3.3 pmol/mL)
Sample : PA-Sugar Chain Series, manufactured by TAKARA SHUZO CO., LTD.

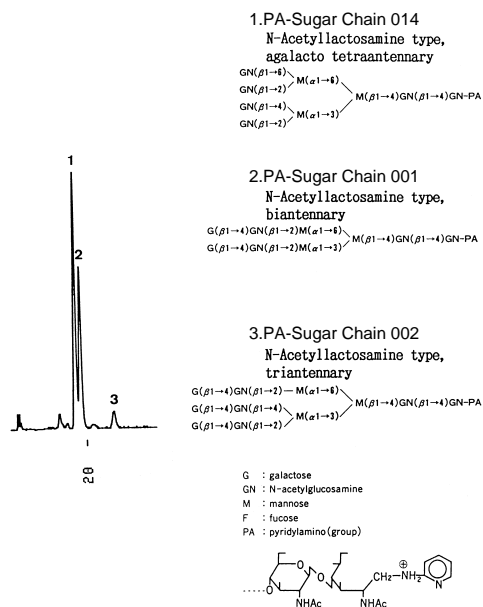
ピリジルアミノ化(PA)糖
Pyridylamino(PA)-Sugar chains



(G910607A)

Column : YMC-Pack ODS-A (5 μ m, 12nm)
150 \times 4.6 mm I.D.
Eluent : methanol/20mM NH₄H₂PO₄ (5/95)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : FLS at Ex.320 nm, Em. 400 nm, 16 mV/FS
Injection : 2 μ L (3.3 pmol/mL)
Sample : PA-Sugar Chain Series, manufactured by TAKARA SHUZO CO., LTD.

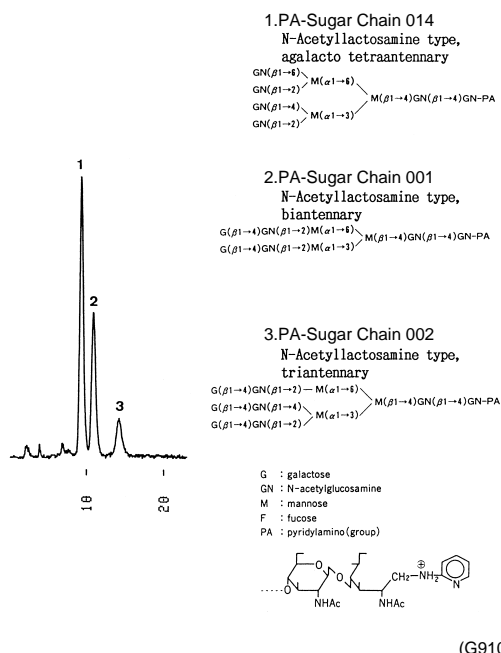
ピリジルアミノ化(PA)糖
Pyridylamino(PA)-Sugar chains



(G910620B)

Column : YMC-Pack Polyamine II
150 \times 4.6 mm I.D.
Eluent : acetonitrile/20mM NH₄H₂PO₄ (60/40)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : FLS at Ex. 320 nm, Em. 400 nm, 8 mV/FS
Injection : 5 μ L (3.3 pmol/mL)
Sample : PA-Sugar Chain Series, manufactured by TAKARA SHUZO CO., LTD.

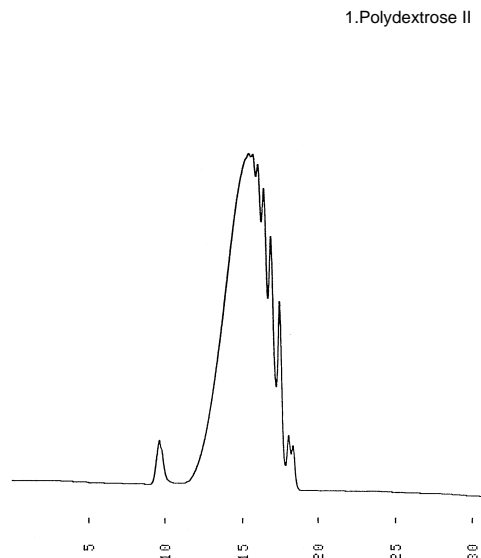
ピリジルアミノ化(PA)糖
Pyridylamino(PA)-Sugar chains



(G910620A)

Column : YMC-Pack Polyamine II
150 \times 4.6 mm I.D.
Eluent : methanol/20mM NH₄H₂PO₄ (80/20)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : FLS at Ex.320 nm, Em. 400 nm, 4 mV/FS
Injection : 3 μ L (3.3 pmol/mL)
Sample : PA-Sugar Chain Series, manufactured by TAKARA SHUZO CO., LTD.

ポリデキストロース
Polydextrose

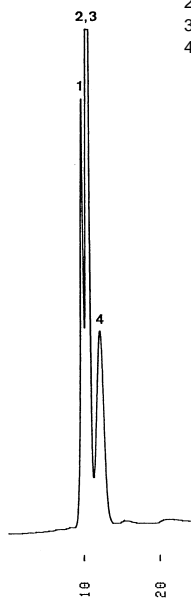


(G911226A)

Column : YMC-Pack Diol-60
500 \times 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (25)
Detection : RI, 64 \times 10⁶ RIU/FS
Injection : 40 μ L (25 mg/mL)

プルラン
Pullulans

- 1.Pullulan P-800 (MW 853,000)
- 2.Pullulan P-50 (MW 48,000)
- 3.Pullulan P-20 (MW 23,700)
- 4.Pullulan P-5 (MW 5,800)

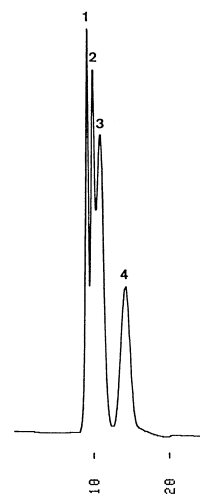


(G911216A)

Column : YMC-Pack Diol-60
500 x 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 16 x 10⁻⁶ RIU/FS
Injection : 180 μ L (0.25 mg/mL)
Sample : Shodex STANDARD P-82, manufactured by SHOWA DENKO K.K.

プルラン
Pullulans

- 1.Pullulan P-800 (MW 853,000)
- 2.Pullulan P-50 (MW 48,000)
- 3.Pullulan P-20 (MW 23,700)
- 4.Pullulan P-5 (MW 5,800)

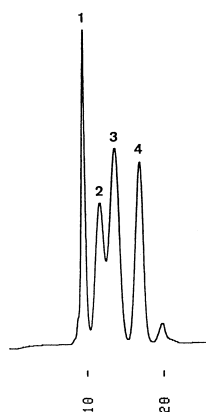


(G911216B)

Column : YMC-Pack Diol-120
500 x 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 16 x 10⁻⁶ RIU/FS
Injection : 180 μ L (0.25 mg/mL)
Sample : Shodex STANDARD P-82, manufactured by SHOWA DENKO K.K.

プルラン
Pullulans

- 1.Pullulan P-800 (MW 853,000)
- 2.Pullulan P-50 (MW 48,000)
- 3.Pullulan P-20 (MW 23,700)
- 4.Pullulan P-5 (MW 5,800)

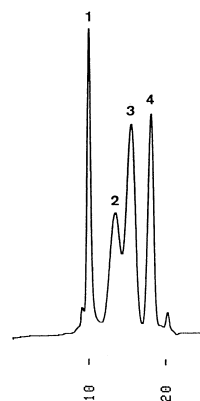


(G911216C)

Column : YMC-Pack Diol-200
500 x 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 16 x 10⁻⁶ RIU/FS
Injection : 180 μ L (0.25 mg/mL)
Sample : Shodex STANDARD P-82, manufactured by SHOWA DENKO K.K.

プルラン
Pullulans

- 1.Pullulan P-800 (MW 853,000)
- 2.Pullulan P-50 (MW 48,000)
- 3.Pullulan P-20 (MW 23,700)
- 4.Pullulan P-5 (MW 5,800)

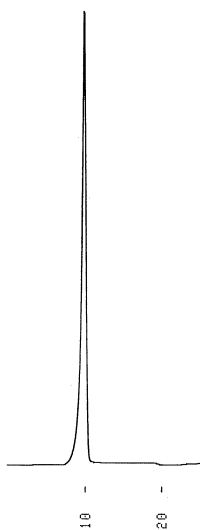


(G911216D)

Column : YMC-Pack Diol-300
500 x 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 16 x 10⁻⁶ RIU/FS
Injection : 180 μ L (0.25 mg/mL)
Sample : Shodex STANDARD P-82, manufactured by SHOWA DENKO K.K.

コンドロイチン
Chondroitin

1.Chondroitin, Na salt

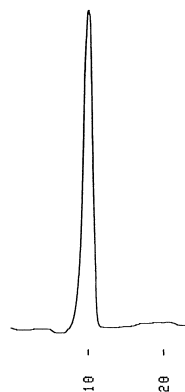


(G920107A)

Column : YMC-Pack Diol-300
500 × 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 32 × 10⁶ RIU/FS
Injection : 20 μ L (5.0 mg/mL)

コンドロイチン硫酸 A
Chondroitin sulfate A

1.Chondroitin sulfate A, Na salt

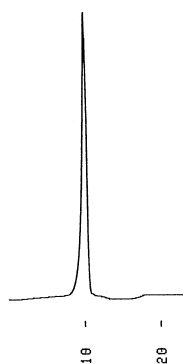


(G920107C)

Column : YMC-Pack Diol-300
500 × 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 16 × 10⁶ RIU/FS
Injection : 20 μ L (5.0 mg/mL)

コンドロイチン硫酸 B
Chondroitin sulfate B

1.Chondroitin sulfate B, Na salt

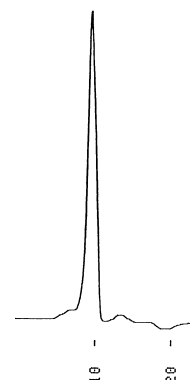


(G920107E)

Column : YMC-Pack Diol-300
500 × 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 32 × 10⁶ RIU/FS
Injection : 20 μ L (5.0 mg/mL)

コンドロイチン硫酸 C
Chondroitin sulfate C

1.Chondroitin sulfate C, Na salt



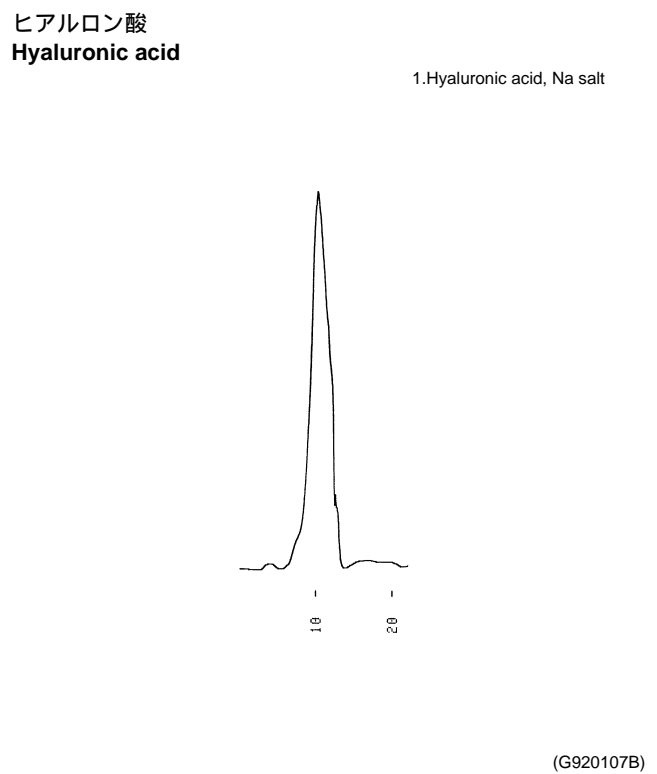
(G920107D)

Column : YMC-Pack Diol-300
500 × 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 16 × 10⁶ RIU/FS
Injection : 20 μ L (5.0 mg/mL)

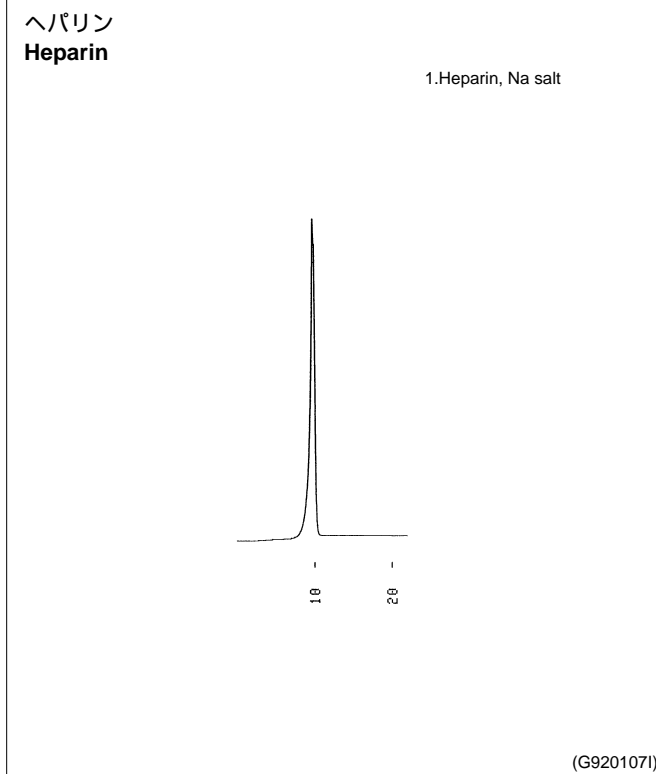
2 糖類 Carbohydrates

2

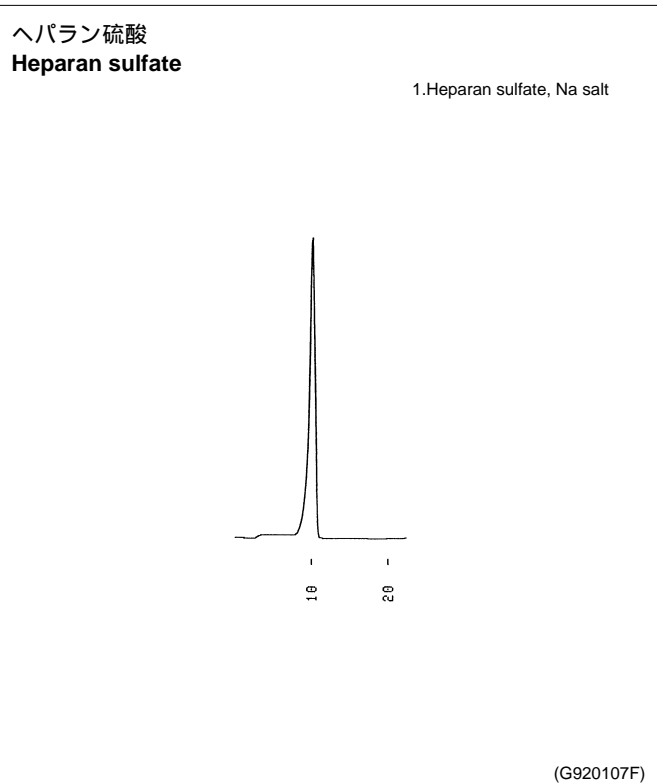
糖類



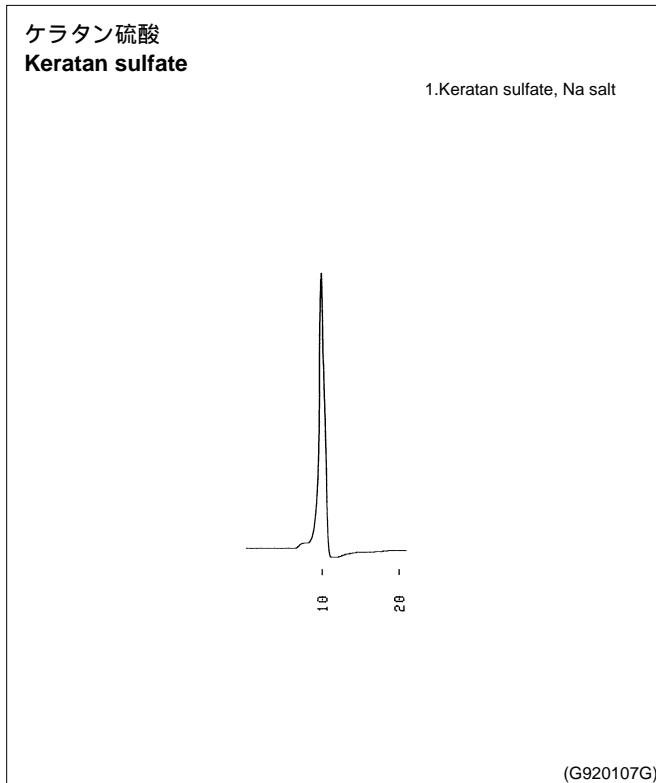
Column : YMC-Pack Diol-300
500 × 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 8 × 10⁸ RIU/FS
Injection : 20 μ L (5.0 mg/mL)



Column : YMC-Pack Diol-300
500 × 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 32 × 10⁸ RIU/FS
Injection : 20 μ L (5.0 mg/mL)



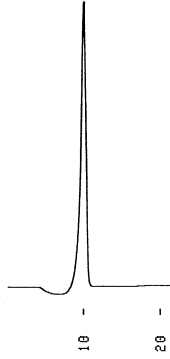
Column : YMC-Pack Diol-300
500 × 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 32 × 10⁸ RIU/FS
Injection : 20 μ L (5.0 mg/mL)



Column : YMC-Pack Diol-300
500 × 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 32 × 10⁸ RIU/FS
Injection : 20 μ L (5.0 mg/mL)

ケラタンポリ硫酸
Keratan polysulfate

1.Keratan polysulfate, Na salt

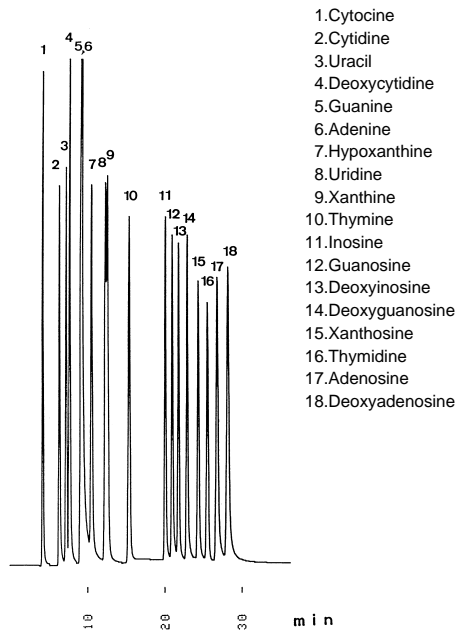


(G920107H)

Column : YMC-Pack Diol-300
500 × 8.0 mm I.D.
Eluent : water
Flow rate : 1.0 mL/min
Temperature : ambient (24)
Detection : RI, 32 × 10⁻⁶ RIU/FS
Injection : 20 μ L (5.0 mg/mL)

核酸塩基・ヌクレオシド

Nucleosides and bases

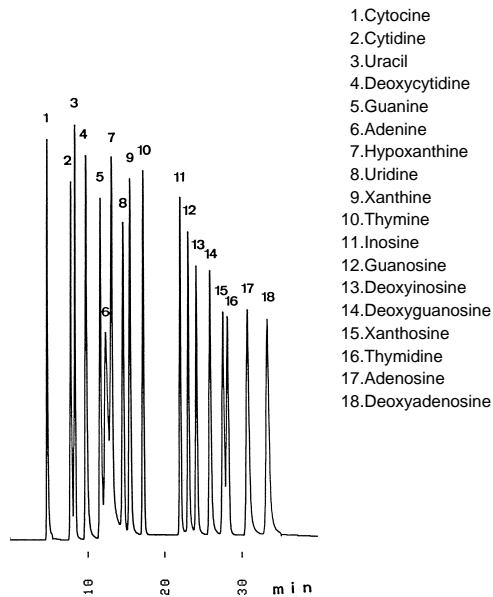


(T910404C)

Column : YMC-Pack ODS-A (5 μ m, 12nm)
250 \times 4.6 mm I.D.
Eluent : A)20mM CH₃COOH - CH₃COONH₄ (pH 3.5)
B)20mM CH₃COOH - CH₃COONH₄ (pH 3.5)/methanol (90/10)
30%B (0-5min), 30-100%B (5-13min,linear), 100%B (13-40min)
Flow rate : 0.7 mL/min
Temperature : 30
Detection : UV at 260 nm, 0.08 AUFS
Injection : 12 μ L (0.001 ~ 0.05 mg/mL)

核酸塩基・ヌクレオシド

Nucleosides and bases

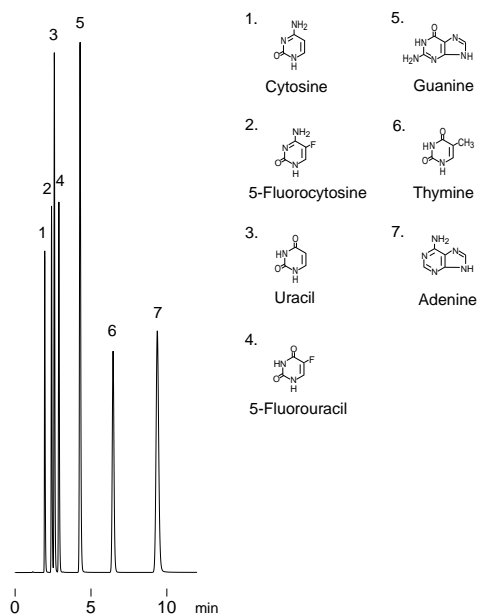


(T910404A)

Column : YMC-Pack ODS-AQ (5 μ m, 12nm)
250 \times 4.6 mm I.D.
Eluent : A)20mM CH₃COOH - CH₃COONH₄ (pH 3.5)
B)20mM CH₃COOH - CH₃COONH₄ (pH 3.5)/methanol (90/10)
30%B (0-5min), 30-100%B (5-13min,linear), 100%B (13-40min)
Flow rate : 0.7 mL/min
Temperature : 30
Detection : UV at 260 nm, 0.08 AUFS
Injection : 12 μ L (0.001 ~ 0.05 mg/mL)

核酸塩基

Nucleic acid bases

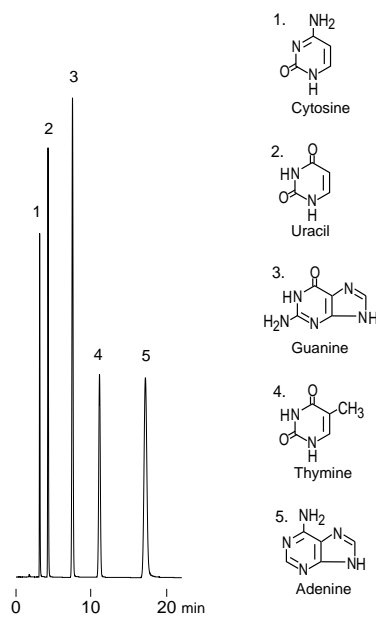


(J010209E)

Column : Hydrosphere C18 (3 μ m, 12nm)
100 \times 4.6 mm I.D.
Eluent : 20mM KH₂PO₄ - K₂HPO₄ (pH 6.9)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 254 nm, 0.128 AUFS
Injection : 10 μ L (0.01 ~ 0.02 mg/mL)

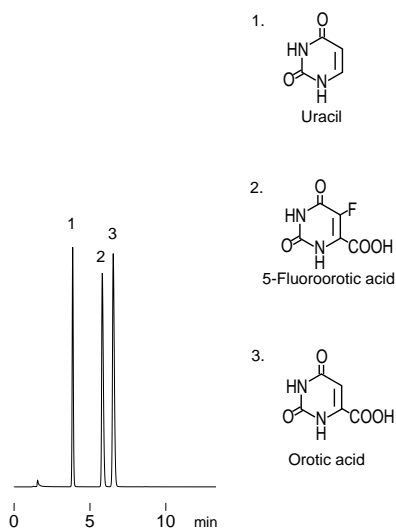
核酸塩基

Nucleic acid bases



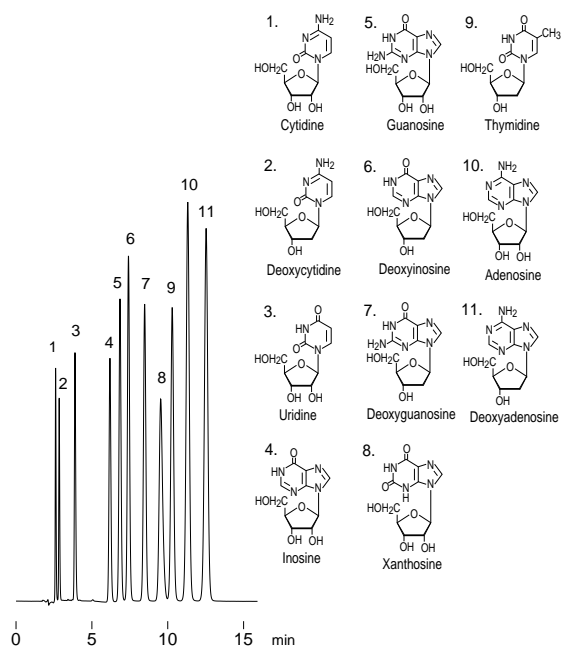
(S991029A)

Column : Hydrosphere C18 (5 μ m, 12nm)
150 \times 4.6 mm I.D.
Eluent : 20mM KH₂PO₄ - K₂HPO₄ (pH 6.9)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 254 nm, 0.064 AUFS
Injection : 8 μ L (0.01 ~ 0.02 mg/mL)

オロチン酸
Orotic acid

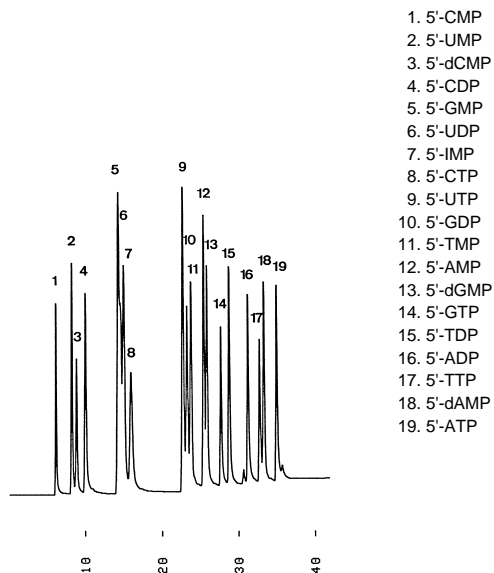
(A000711A)

Column : Hydrosphere C18 (5 μ m, 12nm)
150 \times 4.6 mm I.D.
Eluent : 20mM H_3PO_4
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 254 nm, 0.256 AUFS
Injection : 10 μ L (0.015 ~ 0.1 mg/mL)

ヌクレオシド
Nucleosides

(A000802B)

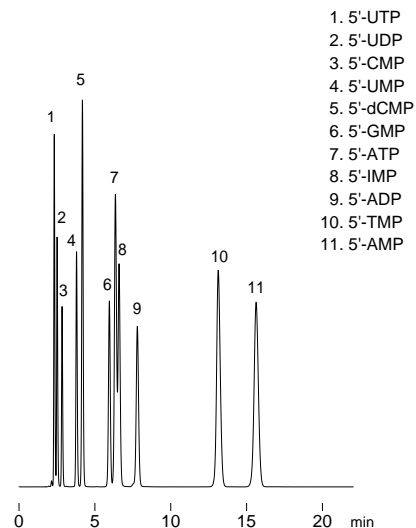
Column : Hydrosphere C18 (5 μ m, 12nm)
150 \times 4.6 mm I.D.
Eluent : 20mM $\text{NH}_4\text{H}_2\text{PO}_4$ - H_3PO_4 (pH 3.5) / methanol (92/8)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 260 nm, 0.064 AUFS
Injection : 15 μ L (5 ~ 15 μ g/mL)

ヌクレオチド
Nucleotides

(T910424A)

Column : YMC-Pack ODS-AM (5 μ m, 12nm)
250 \times 4.6 mm I.D.
Eluent : A) 0.2M TEAA* (pH6.6)
B) 0.2M TEAA (pH6.6)/acetonitrile (95/5)
4%B (0-10min), 4-100%B (10-35min, linear), 100%B (35-50min)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 260 nm, 0.16 AUFS
Injection : 14 μ L (0.029 ~ 0.16 mg/mL)

* TEAA:triethylamine-acetic acid

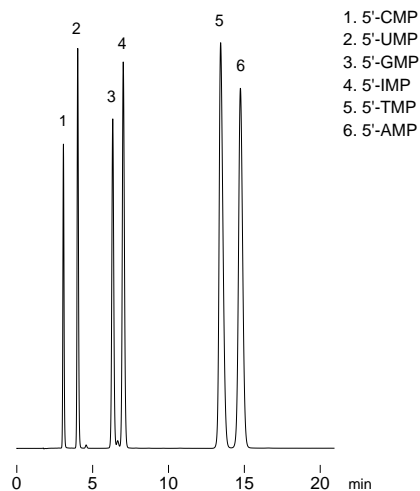
ヌクレオチド
Nucleotides

(A000922A)

Column : Hydrosphere C18 (5 μ m, 12nm)
150 \times 4.6 mm I.D.
Eluent : 100mM KH_2PO_4 - K_2HPO_4 (pH 5.5)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 260 nm, 0.256 AUFS
Injection : 10 μ L (0.05 ~ 0.15 mg/mL)

ヌクレオチド

Nucleotides



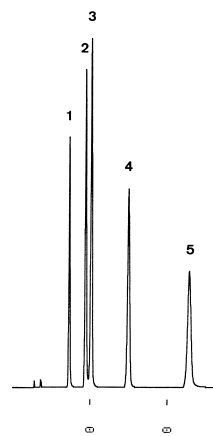
(A000912B)

Column : Hydrosphere C18 (5 μ m, 12nm)
150 \times 4.6 mm I.D.
Eluent : 100mM KH₂PO₄
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 260 nm, 0.256 AUFS
Injection : 10 μ L (0.1 ~ 0.3 mg/mL)

ヌクレオチド

Nucleotides

1. 5'-CMP
2. 5'-AMP
3. 5'-UMP
4. 5'-IMP
5. 5'-GMP



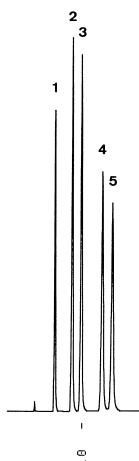
(T920525C)

Column : YMC-Pack Polyamine II
250 \times 4.6 mm I.D.
Eluent : 50mM KH₂PO₄ - H₃PO₄ (pH 3.5)
Flow rate : 1.0 mL/min
Temperature : 40
Detection : UV at 260 nm, 0.16 AUFS
Injection : 10 μ L (0.05 ~ 0.1 mg/mL)

ヌクレオチド

Nucleotides

1. 5'-CMP
2. 5'-AMP
3. 5'-UMP
4. 5'-IMP
5. 5'-GMP



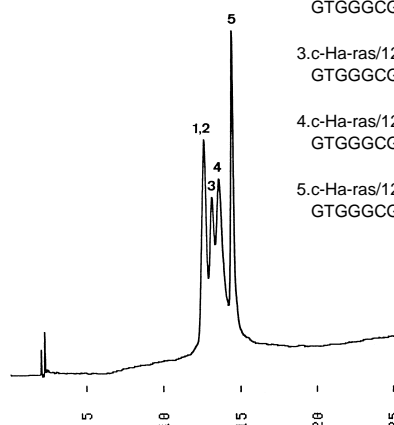
(T920525D)

Column : YMC-Pack NH₂ (5 μ m, 12nm)
250 \times 4.6 mm I.D.
Eluent : 50mM KH₂PO₄ - H₃PO₄ (pH 3.5)
Flow rate : 1.0 mL/min
Temperature : 40
Detection : UV at 260 nm, 0.16 AUFS
Injection : 10 μ L (0.05 ~ 0.1 mg/mL)

オリゴヌクレオチド

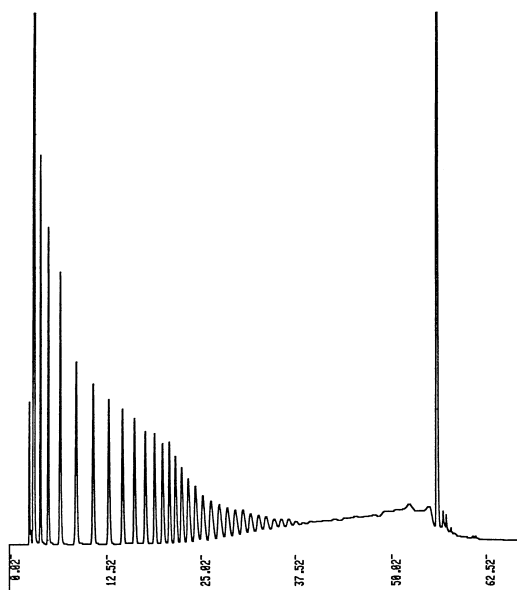
Oligonucleotides

- 1.c-Ha-ras/12 (20mer)
GTGGGCGCC-AGC-GGTGTGGG
Ser
- 2.c-Ha-ras/12 (20mer)
GTGGGCGCC-GCC-GGTGTGGG
Ala
- 3.c-Ha-ras/12 (20mer)
GTGGGCGCC-GAC-GGTGTGGG
Asp
- 4.c-Ha-ras/12 (20mer)
GTGGGCGCC-GTC-GGTGTGGG
Val
- 5.c-Ha-ras/12 (20mer)
GTGGGCGCC-CGC-GGTGTGGG
Arg



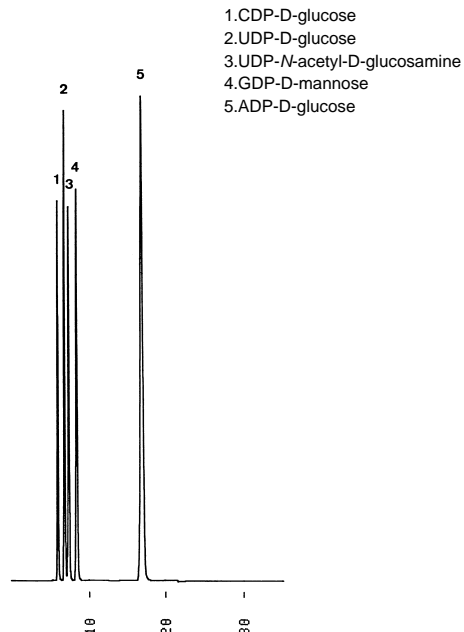
(G910620C)

Column : YMC-Pack ODS-A (5 μ m, 30nm)
150 \times 4.6 mm I.D.
Eluent : A)100mM triethylamine - acetic acid (pH 6.5)/acetonitrile (94/6)
B)100mM triethylamine - acetic acid (pH 6.5)/acetonitrile (85/15)
0-100%B (0-25min,linear)
Flow rate : 1.0 mL/min
Temperature : 30
Detection : UV at 260 nm, 0.01 AUFS
Injection : 15 μ L (2.0 pmol/ μ L)
Sample : TAKARA ras Gene Probe set, manufactured by TAKARA SHUZO CO., LTD.

オリゴヌクレオチド , poly(A)
Poly(A)

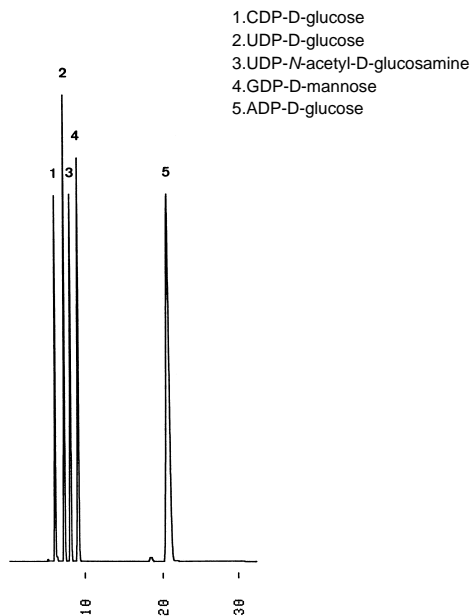
Courtesy of Dr.Y.Baba, Kobe Women's College of Pharmacy (Y920608A)

Column : YMC-Pack ODS-AM (5 μ m, 12nm)
150 \times 6.0 mm I.D.
Eluent : A)0.1M phosphate buffer (pH 7)
B)0.1M phosphate buffer (pH 7) / acetonitrile (75/25)
20-27%B (0-15min), 27-35%B (15-90min)
Flow rate : 1.0 mL/min
Temperature : ambient
Detection : UV at 260 nm
Injection : 10 μ L
Sample : Poly(A)

糖ヌクレオチド
Sugar nucleotides

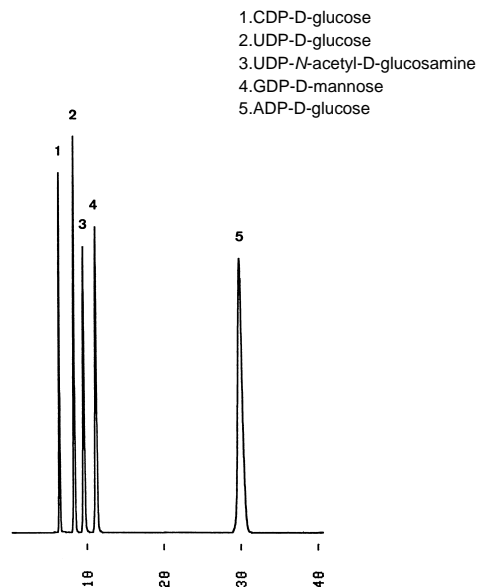
(T911206D)

Column : YMC-Pack Ph (5 μ m, 12nm)
250 \times 4.6 mm I.D.
Eluent : 100mM TEAA¹⁾ (pH 6.0)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 260 nm, 0.16 AUFS
Injection : 5 μ L (0.27 ~ 0.71 mg/mL)
1) TEAA: triethylamine-acetic acid

糖ヌクレオチド
Sugar nucleotides

(T911206B)

Column : YMC-Pack ODS-A (5 μ m, 12nm)
250 \times 4.6 mm I.D.
Eluent : 20mM TEAA¹⁾ (pH 5.7)/acetonitrile (99/1)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 260 nm, 0.16 AUFS
Injection : 5 μ L (0.27 ~ 0.71 mg/mL)
1) TEAA: triethylamine-acetic acid

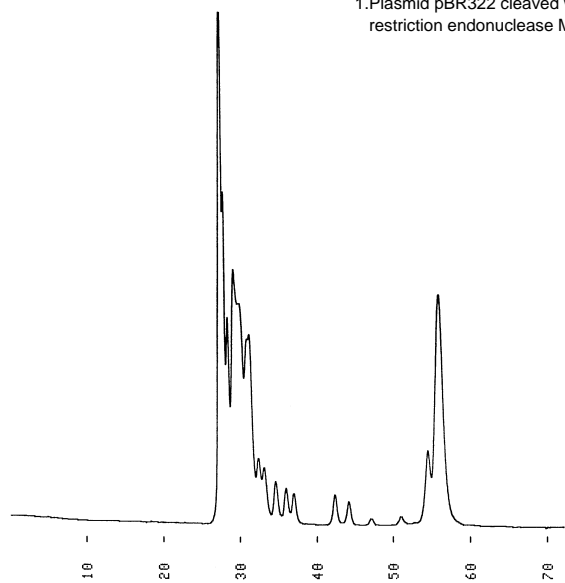
糖ヌクレオチド
Sugar nucleotides

(T911206E)

Column : YMC-Pack ODS-A (5 μ m, 30nm)
250 \times 4.6 mm I.D.
Eluent : 100mM TEAA¹⁾ (pH 6.0)
Flow rate : 1.0 mL/min
Temperature : 37
Detection : UV at 260 nm, 0.16 AUFS
Injection : 5 μ L (0.27 ~ 0.71 mg/mL)
1) TEAA: triethylamine-acetic acid

プラスミド pBR322 の制限酵素 Msp I 分解物
Plasmid pBR322 restriction fragments

1. Plasmid pBR322 cleaved with
restriction endonuclease Msp



(G920109B)

Column : YMC-Pack Diol-300 + Diol-200
500 x 8.0 mm I.D. x 2
Eluent : 0.1M KH₂PO₄ - K₂HPO₄ (pH 7.0) containing 0.2M NaCl
Flow rate : 0.7 mL/min
Temperature : ambient (26)
Detection : UV at 260 nm, 0.01 AUFS
Injection : 3 μ L (0.49 mg/mL)
Sample : Plasmid pBR322 cleaved with restriction endonuclease Msp