

HPLC Column
for Liquid Chromatography

For Hydrophilic Interaction Liquid Chromatography (HILIC)

Develosil™ ANIDIUS



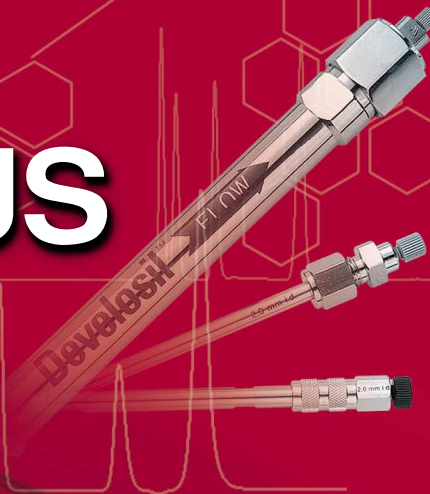
NOMURA CHEMICAL CO., LTD.

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Develosil™ ANIDIUS

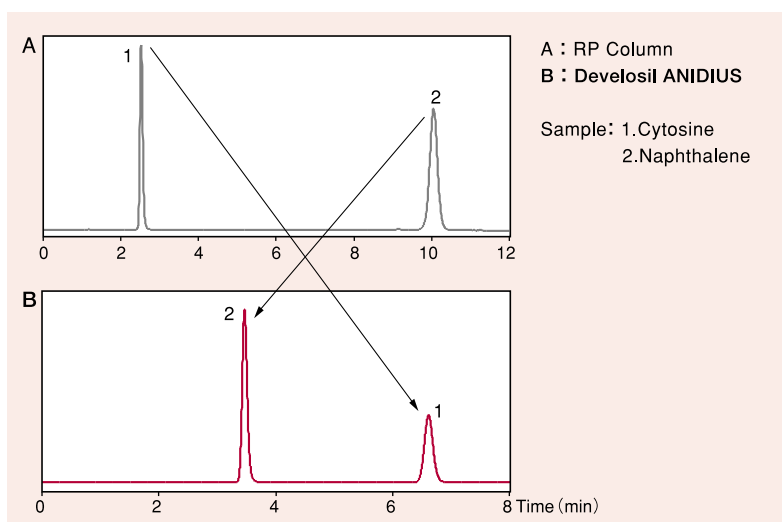
Develosil ANIDIUS was designed for HILIC.

Develosil ANIDIUS is most suitable for the analysis of the high polarity compound which cannot maintain it by the reverse phase chromatography.



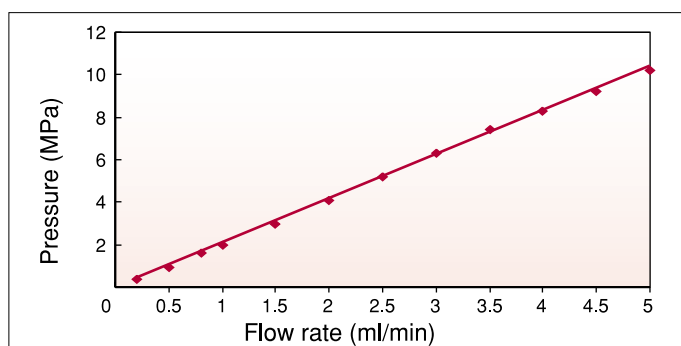
Characteristic

- An elution pattern unlike reverse phase chromatography.
- The filler (Chemical bond type) was composed newly in own company.
- The mobile phase uses organic solvent and water or buffer.
- The silica base uses Surface Area:300m²/g, Pore Diameter:14nm, Pore capacity:1.15ml/g, and Bonded-Phase: -OH, -NH₂



1 Relation of the Flow rate and Pressure

Develosil™ ANIDIUS



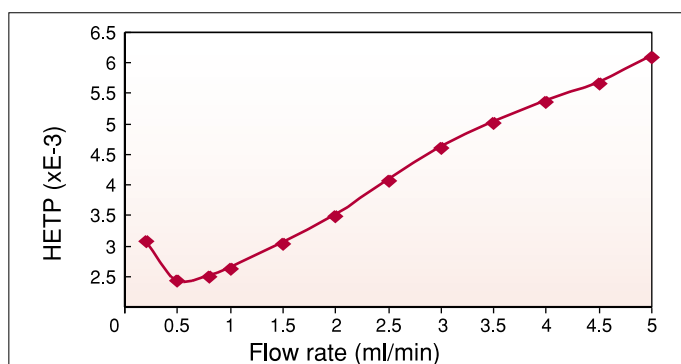
Relation of the Flow rate and Pressure were plotted in the of following conditions.

The pressure rises when they give Flow rate, and proportion relations have this. Develosil ANIDIUS sets organic solvent density in a high condition. Therefore, the analysis is performed by low pressure.

Column : Develosil ANIDIUS
Size : 4.6x250mm
Mobile Phase : Acetonitrile/5mM Ammonium Formate (pH3) =90/10
Temp. : 30°C
Detector : UV254nm
Sample : Cytosine

2 Relation of the Flow rate and HETP

Develosil™ ANIDIUS

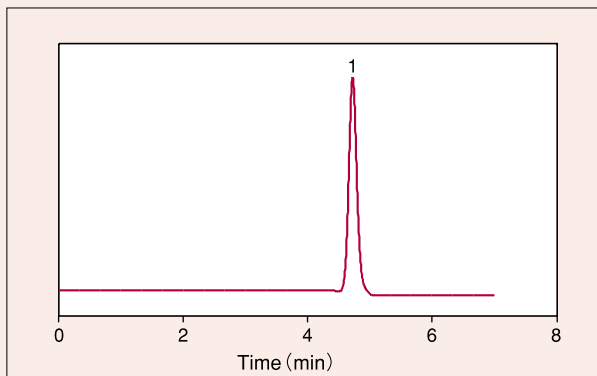


The most suitable Flow rate is judged by plotting Flow rate and HETP. HETP is a reciprocal number of the plate, and performance will appear if this value is small. However, please be careful to the expanses in the column.

Column : Develosil ANIDIUS
Size : 4.6x250mm
Mobile Phase : Acetonitrile/5mM Ammonium Formate (pH3) =90/10
Temp. : 30°C
Detector : UV254nm
Sample : Cytosine

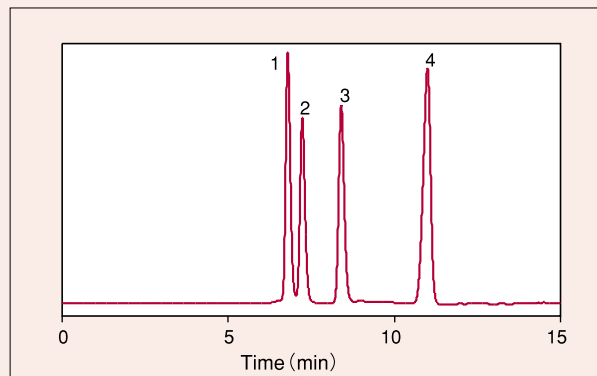
③ Application data

● Allantoin



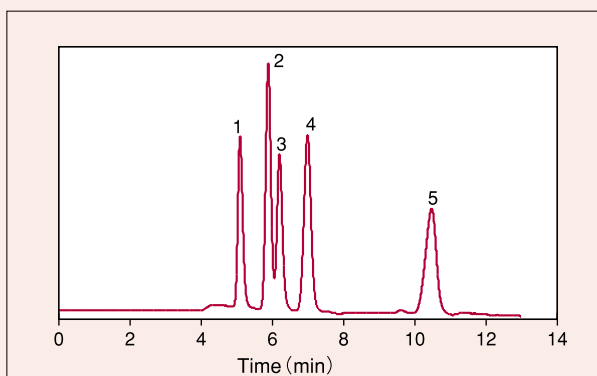
Column : Develosil ANIDIUS
 Size : 4.6x150mm
 Mobile Phase : Acetonitrile/5mM Ammonium Formate (pH2) =85/15
 Flow rate : 1.0ml/min
 Temp. : 30°C
 Detector : RI
 Sample : 1.Allantoin

● Amino acids



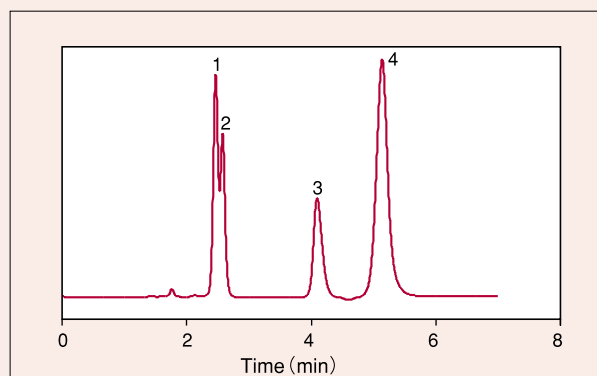
Column : Develosil ANIDIUS
 Size : 4.6x250mm
 Mobile Phase : Acetonitrile/20mM Ammonium Formate (pH7) =75/25
 Flow rate : 1.0ml/min
 Temp. : 30°C
 Detector : RI
 Sample : 1.Leu/2.Ile/3.Val/4.Ala

● Sugars

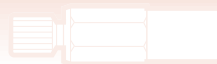


Column : Develosil ANIDIUS
 Size : 4.6x250mm
 Mobile Phase : Acetonitrile/H₂O=80/20
 Flow rate : 1.0ml/min
 Temp. : 30°C
 Detector : RI
 Sample : 1.Rhamnose/2.Ribitol/3.Fluctose
 4.Glucose/5.Maltose

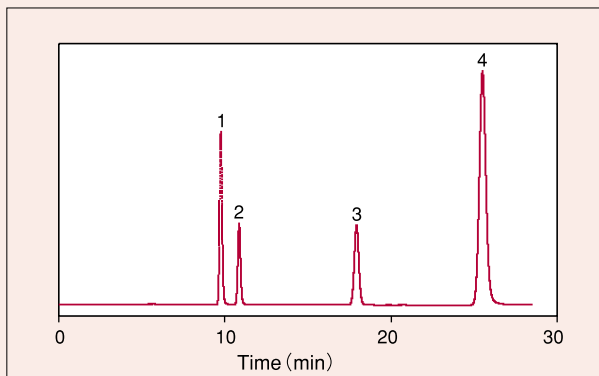
● Organic acids



Column : Develosil ANIDIUS
 Size : 4.6x150mm
 Mobile phase : Acetonitrile/100mM Ammonium Phosphate(pH7)=50/50
 Flow rate : 0.5ml/min
 Temp. : 30°C
 Detector : UV210nm
 Sample : 1.Propionic acid/2.Formic acid/3.Malonic acid
 4.Oxalic acid

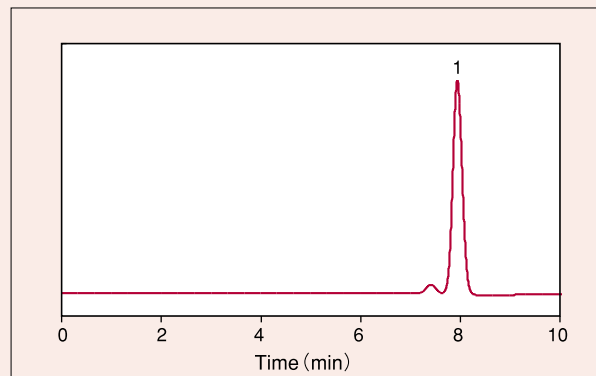


Nucleobase



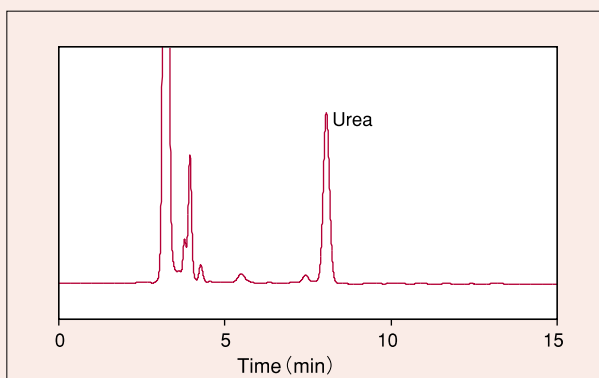
Column : Develosil ANIDIUS
Size : 4.6x250mm
Mobile Phase : Acetonitrile/5mM Ammonium Formate (pH3) =90/10
Flow rate : 0.5ml/min
Temp. : 30°C
Detector : UV254nm
Sample : 1.Thymine/2.Uracil/3.Adenosine/4.Cytosine

Urea



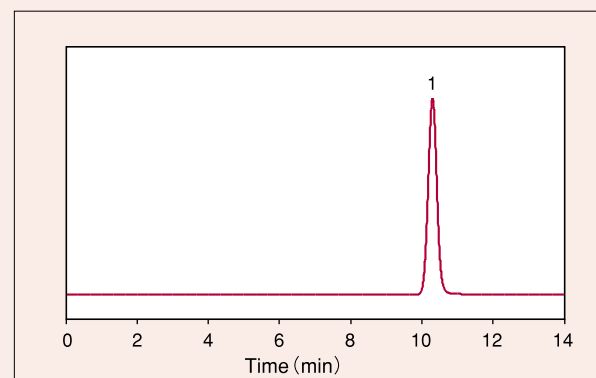
Column : Develosil ANIDIUS
Size : 4.6x150mm
Mobile phase : Acetonitrile/5mM Ammonium Formate (pH3) =90/10
Flow rate : 0.5ml/min
Temp. : 30°C
Sample : 1.Urea

Urea of hand cream



Column : Develosil ANIDIUS
Mobile phase : Acetonitrile/5mM Ammonium Formate (pH3) =90/10
Flow rate : 0.5ml/min
Temp. : 30°C
Detector : UV210nm
Sample : Commercial hand cream

Creatinine



Column : Develosil ANIDIUS
Size : 4.6x150mm
Mobile phase : Acetonitrile/10mM Ammonium Formate (pH3) =90/10
Flow rate : 0.5ml/min
Temp. : 30°C
Detector : UV254nm
Sample : 1.Creatinine



5 Price List

Develosil™ ANIDIUS

Conventional

Main Column

Column size	Price(yen)	Code
4.6x150mm	52,000	ANID546150W
4.6x250mm	62,000	ANID546250W

Guard Column

Column size	Price(yen)	Code
4.0x10mm (4pak)	18,000	ANID540010C
Holder	9,500	—
Cartridge (1pak) + Holder	14,000	ANID540010W
Coupler	3,000	—

Semi-micro

Main Column

Column size	Price(yen)	Code
2.0x150mm	52,000	ANID520150W
2.0x250mm	62,000	ANID520250W

Guard Column

Column size	Price(yen)	Code
1.5x10mm (4pak)	20,000	ANID515010C
Holder	15,000	—
Cartridge (1pak) + Holder	20,000	ANID515010W
Coupler	3,000	—

Semi-preparative

Main Column

Column size	Price(yen)	Code
10x150mm	120,000	ANID5P1150W
10x250mm	160,000	ANID5P1250W

Guard Column

Column size	Price(yen)	Code
8x10mm	20,000	ANID580010W

Preparative

Main Column

Column size	Price(yen)	Code
20x150mm	240,000	ANID5P2150W
20x250mm	320,000	ANID5P2250W

Guard Column

Column size	Price(yen)	Code
20x50mm	110,000	ANID5P2050W

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