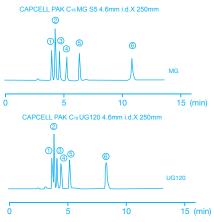
CAPCELL PAK C₁₈ MG

MG stands for Miracle Grade. The enhancement of hydrophobicity had previously been considered to conflict with the enhancement of surface polarity. This miraculous packing material, however, achieved an exquisite balance through the fine control of polymer coating and alkyl group introduction.

A wide range of compounds (acidic, neutral, and basic compounds, low-polarity to high-polarity compounds, and others) can be efficiently separated. This column is the optimum "first choice", being free of specific selectivity, easy-to-use, available in the pH range 2-10, and extremely durable.

Flow Rate

Organic acids



Column : 4.6mm i.d. x 250mm

Mobile Phase $: 0.1 \text{vol}\% \text{ H}_3\text{PO}_4 / \text{CH}_3\text{CN} = 97.5 / 2.5$

: 1.0mL/min

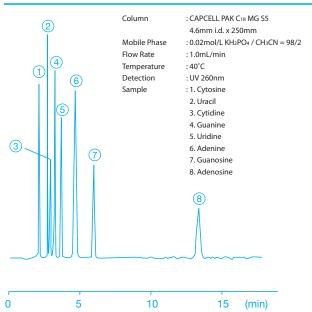
Temperature : 40°C

Detection : UV 210nm

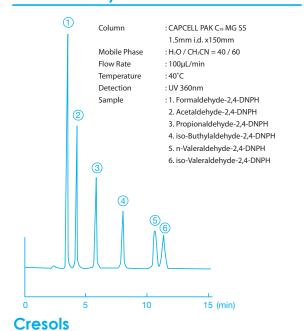
Sample : 1. Malonic acid
2. Lactic acid
3. Acetic acid
4. Citric acid

5. Succinic acid6. Propionic acid

Nucleic acid bases, Nucleosides



DNPH-aldehydes

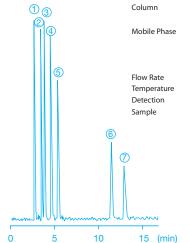


: CAPCELL PAK C18 MG S5

4.6mm i.d. x 250mm

Column

Analysis of Arsenic Compounds by LC/ICP



4.6mm i.d. x 250mm : 10mmol/L Sodium butanesulfonate,

: CAPCELL PAK C₁₈ MG S5

- 4mmol/L Tetramethylammonium hydroxide, 4mmol/L Malonic acid, 0.05vol% CH₃OH
- : 1.0mL/min
- : R.T.
- : ICP
- : 1. Sodium arsenate
- 2. Sodium arsenite
- 3. Methylarsonic acid
- 4. Dimethylarsinic acid
- 5. Arsenobetaine
- 6. Trimethylarsine oxide7. Arsenocholine

Mobile Phase : 50mmol/L Sodium phosphate buffer (pH5.0)/ $CH_3CN = 90 / 10$, 10mmol/L B-Cyclodextrin : 200µL/min Temperature :40°C : UV 277nm Detection Sample : 1. p-cresol 2. m-cresol 3. o-cresol 6 8 10 12 (min)

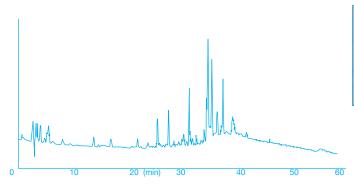
Capillary Columns

The MG S5 and S3 are now available in 0.5mm and 0.3mm i.d. !!

The MG phase is now available in capillary columns to meet the highest sensitivity and resolution, demanded typically in the field of proteomics.

At 150mm length, S5 (5µm) and S3 (3µm) offer NTP (number of theoretical plates) of over 10,000 and 14,000 respectively.

Peptide Mapping with high Resolution





HPLC Conditions

Mobile phase

: CAPCELL PAK C₁₈ MG S3 0.3mm i.d. x 150mm Column

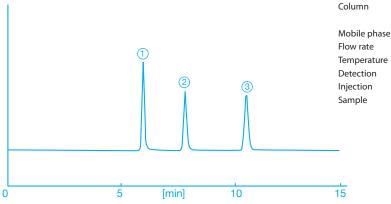
> : A: 0.05vol% TFA , H₂O B: 0.05vol% TFA , CH₃CN

B: 10%(0min) → 50%(45min) → 50%(60min)

Flow rate : $5\mu L/min$ **Temperature** : RT Detection : UV 210 nm : 60nL Injection

Sample : Tryptic digest of casein

High NTP and Excellent Peak Symmetry



: CAPCELL PAK C₁₈ MGS3 0.3mm i.d. x 150mm

: $H_2O / CH_3CN = 25 / 75(v/v)$

:5µL/min Temperature :RT : UV 254nm Detection Injection :60nL : 1. Ethyl benzene

2. n-Propyl benzene

3. n-Butyl benzene

Column Dimension

phase	type	size	i.d.(mm)	length (mm)
C ₁₈	MG	5 μm	0.3	150
			0.5	
		3 μm	0.3	
			0.5	