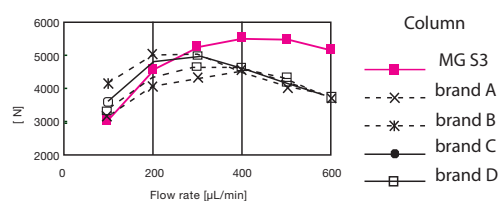


A column for LC-MS and HTS should be inert, and background-free. Polymer-coated Capcell Pak was designed to correspond to such a need. In response to different analytes and conditions, Shiseido proudly provides the chromatographers with improved separation tools.

Column	Phases	Characteristics
MGIII	C ₁₈	Excellent reproducibility of basic compounds under acidic conditions, Low bleeding
MGII	C ₁₈	Minimized residual silanol, ideal for basic compounds under neutral conditions
MG	C ₁₈	High-efficiency separation and well-balanced retention for diverse compounds
UG	C ₁₈ , C ₈ , Ph, CN	Good retention for hydrophobic compounds, fast separation of basic and polar compounds
ACR	C ₁₈	Excellent acidic durability (pH 1~10)
AQ	C ₁₈	Suitable for aqueous mobile phases to be used for polar compounds
DD	C ₈	Superb acidic and basic durability
CR	C ₁₈ +SCX	Provides a large retention for basic compounds
PC HILIC	PC	Excellent retention and separation of very polar and hydrophilic compounds
Protonavi	C ₄	Specific retention for proteins and excellent acidic durability

High efficiency at higher flow rate, Capcell Pak C₁₈ MG, MGII, MGIII S3

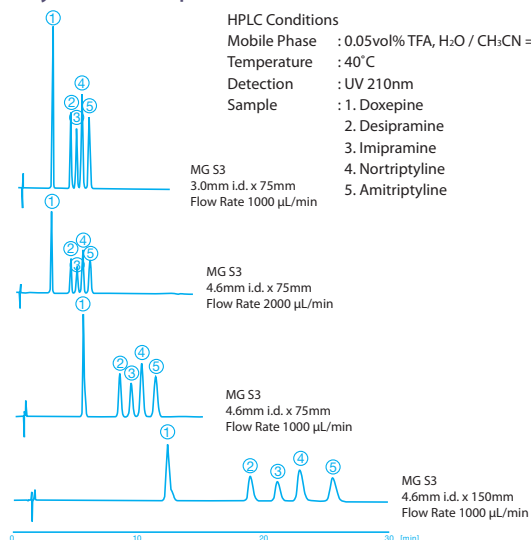
3- μ m CAPCELL PAK shows a large number of theoretical plates at high flow rates



HPLC Conditions
 Column : 2.0mm i.d. x 50mm
 Mobile Phase : H₂O/CH₃CN = 50/50
 Temperature : 40°C
 Detection : UV 254nm
 Sample : Naphthalene

Tricyclic antidepressants

HPLC Conditions
 Mobile Phase : 0.05vol% TFA, H₂O / CH₃CN = 70 / 30
 Temperature : 40°C
 Detection : UV 210nm
 Sample : 1. Doxepine
 2. Desipramine
 3. Imipramine
 4. Nortriptyline
 5. Amitriptyline



Semi-microcolumn of 1.0-2.0mm i.d.

Semi-microcolumn of 1.0-2.0mm i.d. is extremely effective in the high sensitivity analysis. The benefits of reducing the inner diameter of the column are:

- Improvement in absolute sensitivity of a concentration-sensitive detector
- Reduction of mobile phase consumption
- Reduction of baseline noise in LC-MS
- Small Amounts of packing material result in a good dynamic range for substances causing an irreversible adsorption on a stationary phase

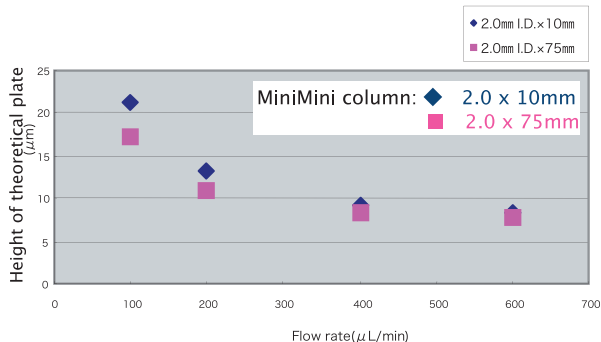
MiniMini columns

Low pressure•Fast separation•Long lifetime

2.0 mm i.d. x **10 mm** 

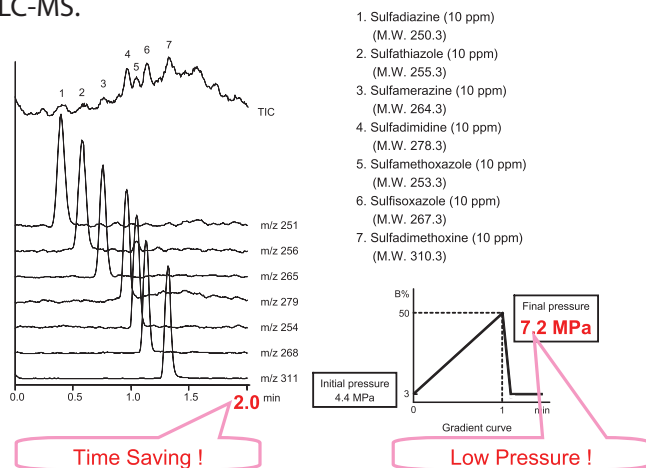
1.5 mm i.d. x **10 mm** 

Designed for fast separation



Low-pressure and Rapid LC-MS of seven sulfa drugs

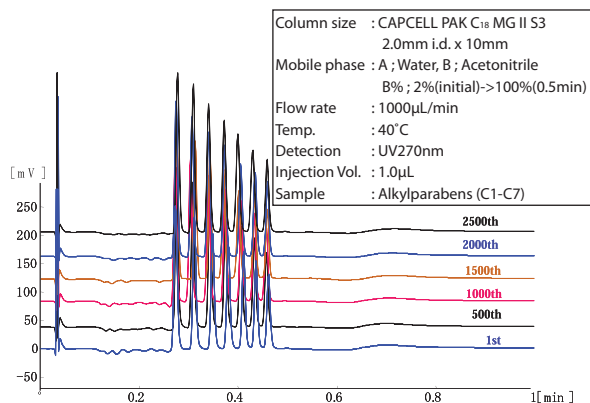
Simultaneous analysis of seven sulfa drugs was attempted with a MiniMini column (1.5mm i.d. x 10mm), which provided high-resolution separation with a low pressure at a high flow rate in LC-MS.



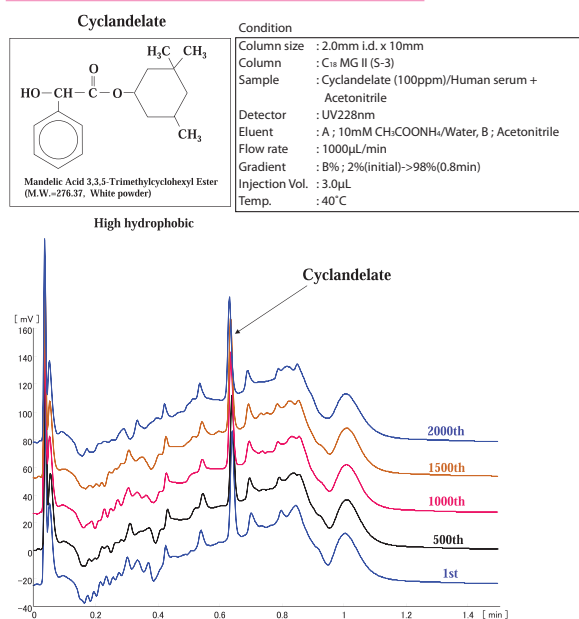
Long lifetime--Durability Test

The original polymer coating and column packing technology bring the excellent durability and lifetime.

Durability test by continuous operations of Alkylparabens



Durability test by continuous operations of a serum-derived sample



Columns for combinatorial chemistry

The unique performance of high efficiency and low pressure is attributed to a narrow distribution of particle diameter. Capcell Pak is suitable to preparative separation in combinatorial chemistry.

