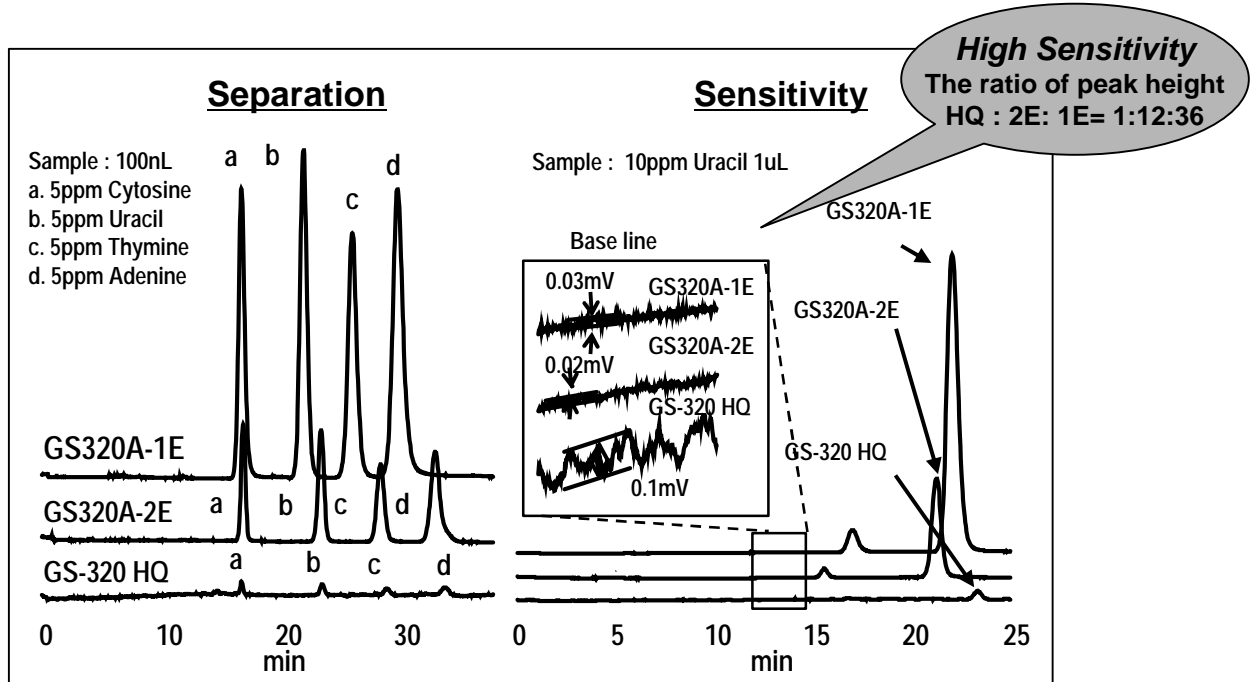


| | |
|--------|---------------------------------|
| Column | GS-320 HQ, GS320A-2E, GS320A-1E |
| Sample | nucleic acid |

Micro columns improve the sensitivity.

The peak height of 1.0mmID column is more than 36 times higher than 7.5mmID using usual HPLC system. Additionally, noise is smaller so detection limit is improved.



Columns : GS320A-1E (1.0mmID x 250mm), GS320A-2E (2.0mmID x 250mm)
GS-320 HQ (7.5mmID x 300mm)

Eluent : 10mM HCOONH₄ buffer (pH4.0)

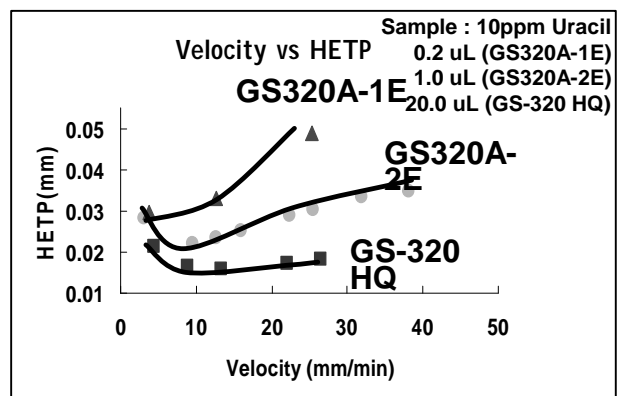
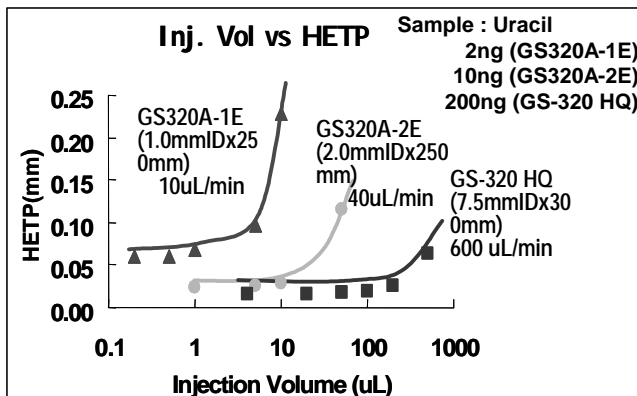
Flow rate : 10uL/min (GS320A-1E), 40uL/min (GS320A-2E), 600uL/min (GS-320 HQ)

Detector : UV (260nm), cell volume : 3uL, optical path length : 7mm

Injector : Rheodyne 8125

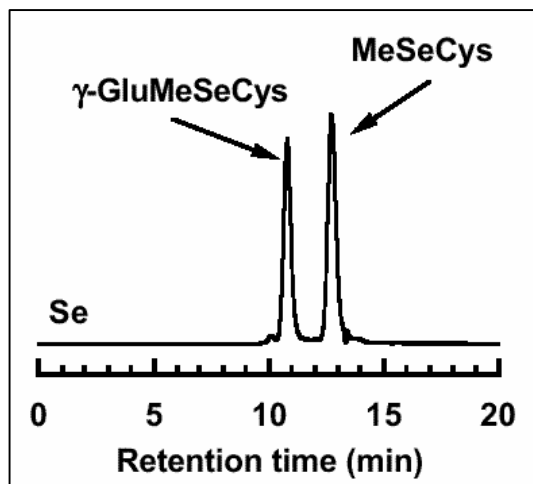
Tubing : 0.1mmID PEEK tube

HPLC : usual HPLC



HETP: Theoretical Plate Number / Column Length, Velocity : Flow rate / Cross Area

◆ Metal combined Amino acid



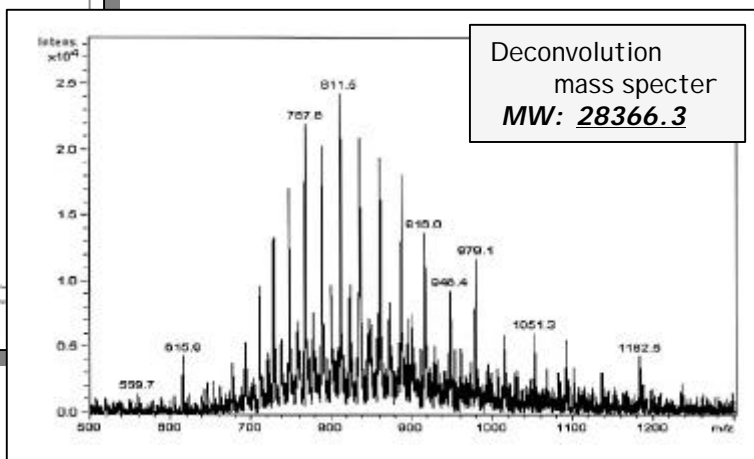
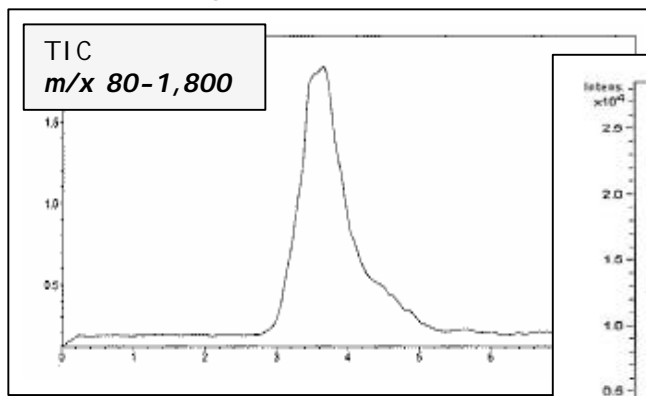
<Sample>

γ-GluMeSeCys
: gamma-Glutamylmethylselenocysteine
MeSeCys
: methylselenocysteine

Column : **Shodex GS320A-M5D (150x0.5mmID)**
Eluent : 50 mM ammonium acetate, pH 6.5
Inj. vol. : 100 nL
Flow rate : 2.0 uL/min
Detection : ICP-MS, Se at m/z 82
Pump : MP710 (GL Sciences Inc.)

*Courtesy by Dr. Yasumitsu Ogra,
Graduate School of Pharmaceutical Sciences, Chiba University*

◆ Staphylococcal Enterotoxin B (toxic protein)



<Sample>

SEB 50 ug/mL aq.

<LC> Instruments : capillary HPLC

Eluent : 0.1 % (v/v) formic acid (H₂O-CH₃OH =1:1)
Column : **Shodex GS520A-M5D (0.5mmID x150 mmL)**
Flow rate : 7 uL/ min (27 bar)
Temp. : 40 deg-C
Inj. Volume : 0.5 uL

<MS> Instruments : MS Trap

Ionization : ESI positive
Capillary voltage : 3500 V
Nebulizer : N₂ (20 psi)
Drying Gas : N₂ (8 L/min, 300 deg-C)
Molecular range : m/z 80-1,800 Fragmentor

*Courtesy by Yasuo Seto, Mieko Kataoka,
Fourth Chemistry Section, National Research
Institute of Police Science*

* Please refer to Chromato News No.18 concerning product line-up.

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