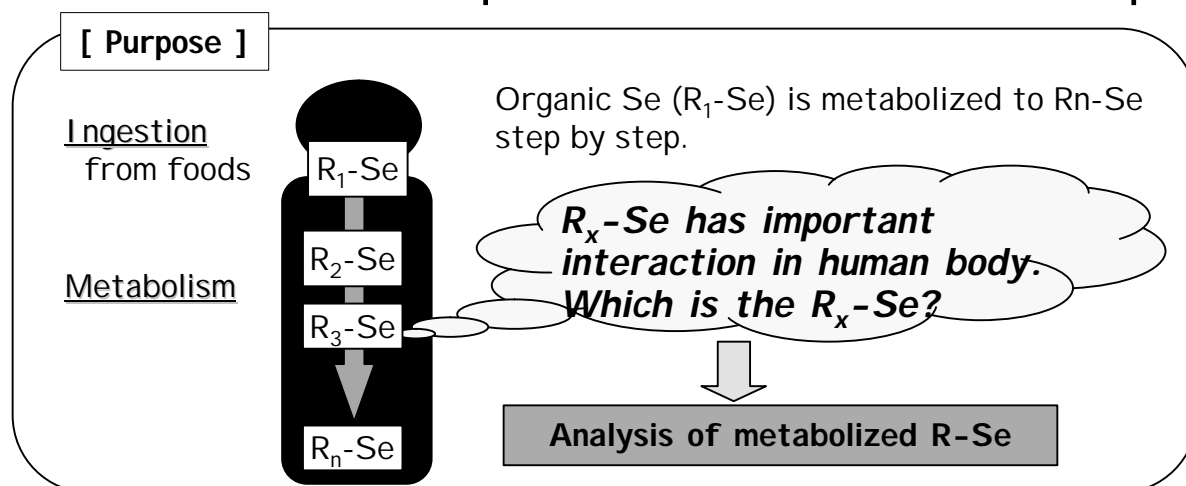


Column	Shodex Micro Column :GS320A-M5D, GS520A-M5D
Sample	gamma-Glutamylmethylselenocysteine, methylselenocysteine, isopropyl methylphosphonate, staphylococcal Enterotoxin B

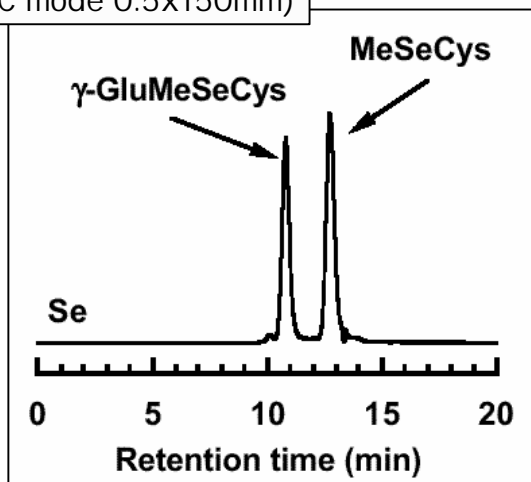
Micro columns for quite a small amount of sample



◆ Selenium in the water extract of selenized garlic

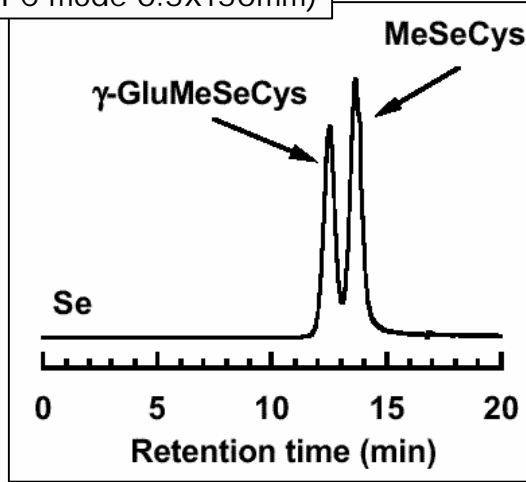
GS320A-M5D

(GFC mode 0.5x150mm)



GS520A-M5D

(GFC mode 0.5x150mm)



<Sample>

γ-GluMeSeCys: gamma-Glutamylmethylselenocysteine
MeSeCys : methylselenocysteine

<Analysis Condition>

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

<Column> GFC mode

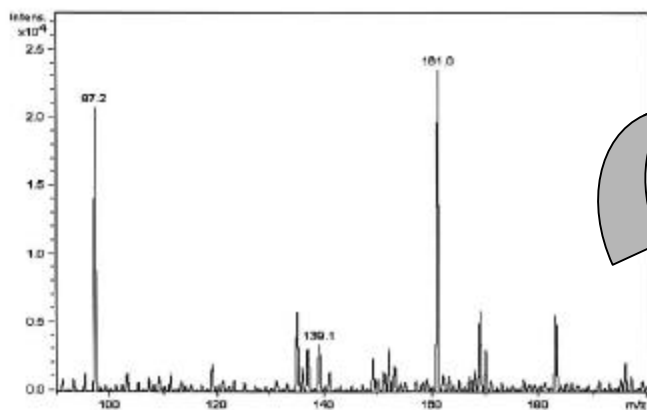
GS320A-M5D (GFC mode 0.5x150mm)
GS520A-M5D (GFC mode 0.5x150mm)

Exclusion limit (pullulan)

40,000
300,000

◆ Detection of poisonous substances

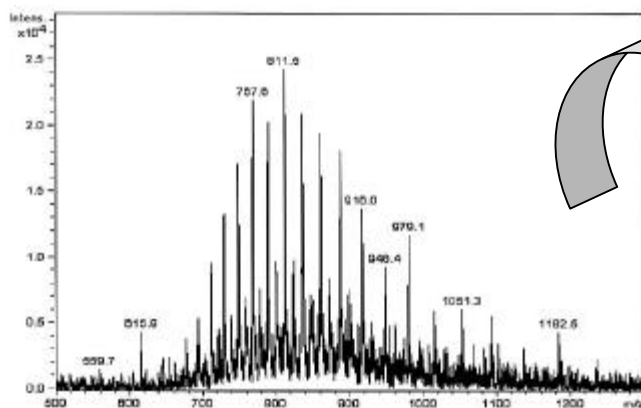
IMPA? (I sopropyl methylphosphonate)



Identified

MW: 138

SEB ? (Staphylococcal Enterotoxin B)



Identified

Estimated from
deconvolution method

MW: 28366.3



Calculation MW data
by arrangement of
amino acids : **28366**

<Sample>

IMPA 20 ug/mL aq., 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 : 7uL/ 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 80-1,800Fragmentor

*Courtesy of 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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