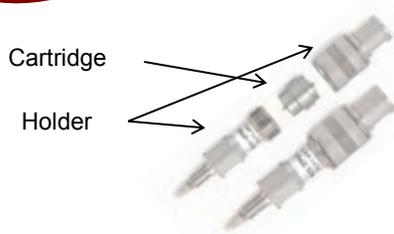
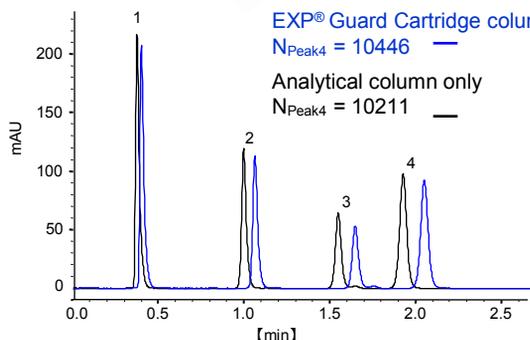




CAPCELL Brand EXP® Guard Cartridge Column



- **Ultra-high-pressure resistance, 100 MPa**
- **No influence on separation efficiency**
- **Zero dead-volume structure to be directly connected to an analytical column**
- **Hand-tightening, easy to attach**



EXP® Guard Cartridge column+ analytical column

$N_{Peak4} = 10446$ —

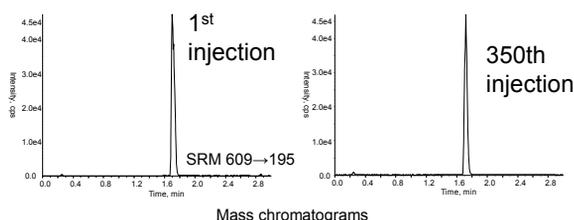
Analytical column only

$N_{Peak4} = 10211$ —

The direct connection generates extremely small dead volume, and does not influence the separation efficiency.

Column : CAPCELL PAK C₁₈ MGIII-H S3; 2.0 mm i.d. x 100 mm
 Cartridge : CAPCELL PAK C₁₈ MGIII-H S3; 2.1 mm i.d. x 5 mm
 Mobile phase : 60% CH₃CN
 Flow rate : 0.5 mL/min
 Temp. : 40°C
 Detection : UV 254 nm
 Sample : Naphthalene (Peak4)

➤ Chromatograms w/ and w/o EXP® Guard Cartridge Column attached



Pretreated serum samples spiked with reserpine were repeatedly introduced to the EXP® Guard Cartridge column and the analytical column connected together. The chromatographic parameters show no column deterioration even after 350 injections.

Column : CAPCELL CORE C₁₈ S2.7; 2.1 mm i.d. x 50mm
 Cartridge : CAPCELL CORE C₁₈ S2.7; 2.1 mm i.d. x 5 mm
 Mobile phase : A) H₂O, B) CH₃CN
 B 20% (0 min)→80%(3.5 min)→20%(3.6 min)

Flow rate : 0.4 mL/min
 Temp. : 40°C
 Detection : MS/MS, SRM (API 5000, AB Sciex), ESI positive
 Sample : Reserpine 5 ng/mL

➤ Results of Durability Test (LC-MS of serum samples spiked with reserpine)

EXP® Guard Cartridge Columns (Cartridge to be placed inside EXP® Guard Cartridge Holder)

P/N	Phase type / Max. Pressure	Functional group	Particle	i.d. (mm)	Length (mm)	List price
			(μm)			(JPY)
3641	CAPCELL PAK IF2 / 100 MPa	C ₁₈	2	2.1	5	25,000
3642	CAPCELL PAK MGIII-H / 50 MPa	C ₁₈	3	2.1	5	25,000
3643	CAPCELL CORE C ₁₈ / 60 MPa	C ₁₈	2.7	2.1	5	25,000
3644	CAPCELL CORE C ₁₈ / 60 MPa	C ₁₈	2.7	4.6	5	25,000
3645	CAPCELL CORE AQ / 60 MPa	C ₂₇	2.7	2.1	5	25,000
3646	CAPCELL CORE PC / 60 MPa	PC	2.7	2.1	5	25,000
3647	CAPCELL CORE PFP / 60 MPa	PFP	2.7	2.1	5	25,000
3648	CAPCELL CORE ADME / 60 MPa	ADME	2.7	2.1	5	25,000
3649	CAPCELL CORE MP / 60 MPa	C ₁₈	2.7	2.1	5	25,000
3650	CAPCELL CORE WP / 60 MPa	C ₁₈	2.7	2.1	5	25,000

EXP[®] Guard Cartridge Holder (Purchase a holder when using the Guard Cartridge column for the first time.)

P/N	Products	List price (JPY)
3640	EXP [®] Direct-connect Holder: for column with i.d. 2.1mm (Hand-tight Nut:1pc, Titanium-hybrid Ferrule: 2pcs)	42,000
3624	Titanium-hybrid Ferrule (5pcs, for exchange)	40,000
3625	Hand-tight Nut (5pcs, for exchange)	16,000

EXP[®] is the trademark of Optimize Technologies, Inc.



● Frontier Science Business Division, SHISEIDO CO., LTD.
1-1-16 Higashishinbashi Minato-ku Tokyo 105-0021
email: hplc@to.shiseido.co.jp FAX 81-3-6253-1416