

NEW!**YMC**
AMERICA, INC.

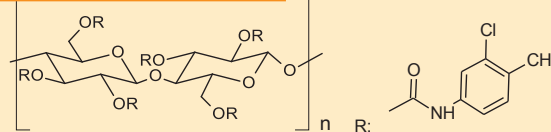
CHIRAL ART Cellulose-SZ

New Chiral Separation Column

Features

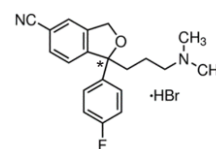
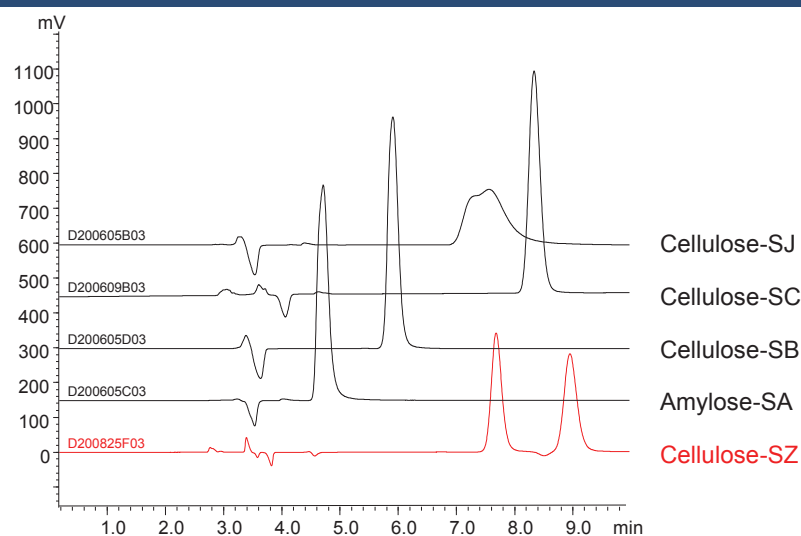
- New chiral selector (immobilized type)
- Unique selectivity complementing other chiral selectors
- Compatible with various organic solvents
- Wide range of applications
- High durability over a wide range of pH

Chiral Selector



Cellulose tris(3-chloro-4-methylphenylcarbamate)

Unique Selectivity Complementing Other Chiral Selectors



Citalopram hydrobromide

Column	: 5 μ m, 250 x 4.6 mm I.D.
Eluent	: <i>n</i> -hexane/2-propanol/diethylamine (70/30/0.1)
Flow rate	: 1.0 mL/min
Temperature	: 25°C
Detection	: UV at 230 nm
Injection	: 5 μ L (1.0 mg/mL)

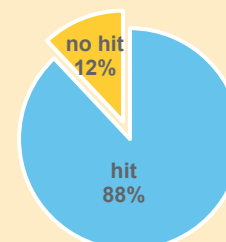
The unique stereoselectivity of CHIRAL ART Cellulose-SZ complements other chiral selectors, improving the probability that a successful solution will be found among the CHIRAL ART family products.

CHIRAL ART Family Products

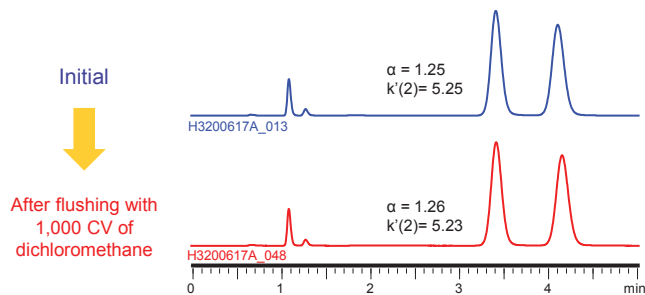
Type	Name	Chiral Selector
Immobilized	CHIRAL ART Amylose-SA	Amylose tris(3,5-dimethylphenylcarbamate)
	CHIRAL ART Cellulose-SB	Cellulose tris(3,5-dimethylphenylcarbamate)
	CHIRAL ART Cellulose-SC	Cellulose tris(3,5-dichlorophenylcarbamate)
	CHIRAL ART Cellulose-SJ	Cellulose tris(4-methylbenzoate)
	NEW CHIRAL ART Cellulose-SZ	Cellulose tris(3-chloro-4-methylphenylcarbamate)
Coated	CHIRAL ART Amylose-C Neo	Amylose tris(3,5-dimethylphenylcarbamate)
	CHIRAL ART Cellulose-C	Cellulose tris(3,5-dimethylphenylcarbamate)

CHIRAL ART Columns Screening Result

Adding Cellulose-SZ improves success rates!



Wide Range of Usable Solvents



Column : 5 μ m, 50 X 4.6 mL I.D.
 Eluent : *n*-hexane/2-propanol (95/5)
 Flow rate : 1.0 mL/min
 Temperature : 25°C
 Sample : Benzoin

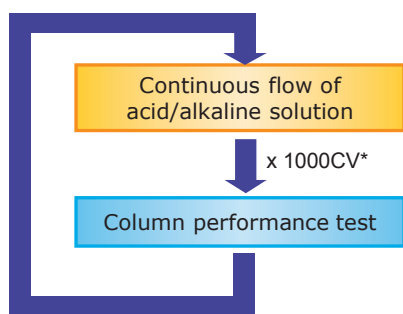
Retention rate of initial column performance (after flushing with 1,000 CV of each solvent at 40°C)

Solvent	α	$k'(2)$
Ethyl acetate	100.2%	98.6%
Tetrahydrofuran	98.6%	98.4%
Dichloromethane	100.3%	99.5%

*CV=Column Volume

As the table above shows, CHIRAL ART Cellulose-SZ has high resistance to various solvents. The change in column performance after exposure to 1,000 column volumes of ethyl acetate, tetrahydrofuran, or dichloromethane was less than 2%.

Wide Usable pH Range



*CV=Column Volume

Continuous flow of acid/alkaline solution

Column : 5 μ m, 50 X 4.6 mm I.D.
 Eluent : Buffer/methanol (90/10)
 Flow rate : 1.0 mL/min

[Acidic condition]

Buffer : 0.1% H₃PO₄ (pH 2)
 Temperature : 40°C

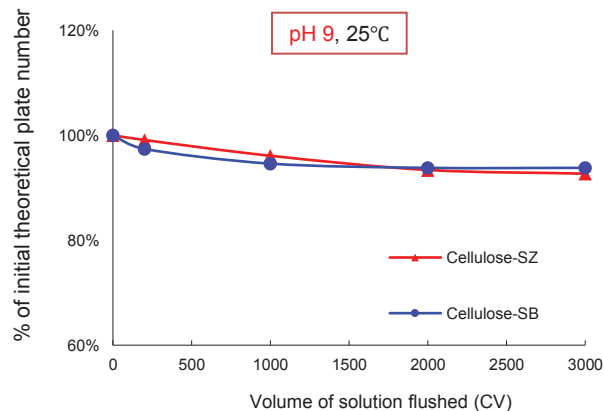
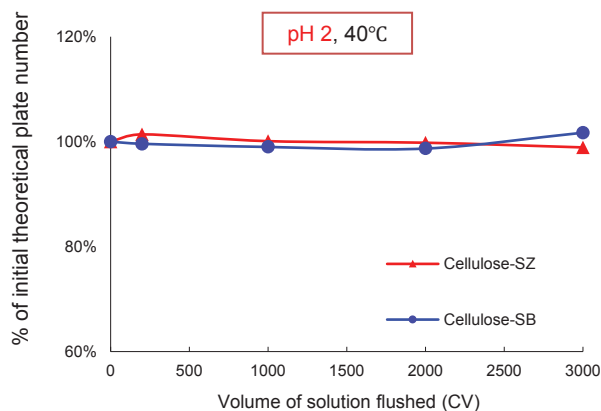
[Basic condition]

Buffer : 20 mM NH₄HCO₃-DEA* (pH 9)
 Temperature : 25°C

*DEA=diethylamine

Column performance test

Column : 5 μ m, 50 X 4.6 mm I.D.
 Eluent : acetonitrile/water (45/55) for Cellulose-SZ
 acetonitrile/water (30/70) for Cellulose-SB
 Flow rate : 1.0 mL/min
 Temperature : 25°C
 Detection : UV at 254 nm
 Sample : *trans*-Stilbene oxide for Cellulose-SZ
 Benzoin for Cellulose-SB



CHIRAL ART Cellulose-SZ and Cellulose-SB both demonstrate excellent chemical durability and stability across a wide pH range. Both also offer stable and consistent performance in reversed phase mode.

Worldwide Availability

YMC Co., LTD.
www.ymc.co.jp

YMC Europe GmbH
www.ymc.de

YMC Switzerland LLC
www.ymc-schweiz.ch

YMC Shanghai Rep. Office
www.ymchina.com

YMC India Pvt. Ltd.
www.ymcindia.com

YMC Korea Co., Ltd.
www.ymckorea.com

YMC Taiwan Co., Ltd.
www.ymctaiwan.com

YMC Singapore Tradelinks Pte. Ltd.
www.ymc.sg

YMC
AMERICA, INC.

YMC America, Inc.

941 Marcon Boulevard
 Allentown, PA 18109 USA
 Phone: +1-610-266-8650
 Fax: +1-610-266-8652
 info@ymcamerica.com
 www.ymcamerica.com

Distributor