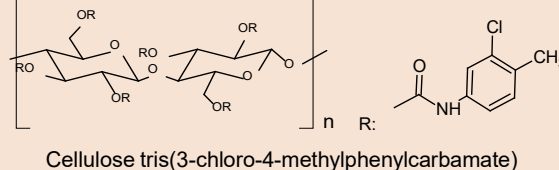


CHIRAL ART Cellulose-SZ

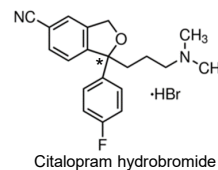
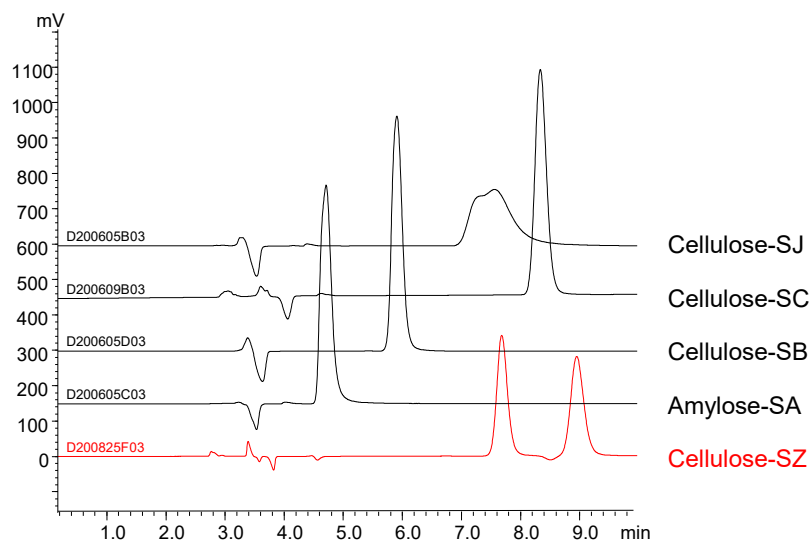
Features

- New chiral selector as an immobilized type
- Wide applications and unique selectivity complementing other chiral selectors
- Compatible with various organic solvents
- High durability over a wide range of pH

Chiral Selector



Unique Selectivity Complementing Other Chiral Selectors



Column : 5 μ m, 250 X 4.6 mm I.D.
 Eluent : *n*-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)

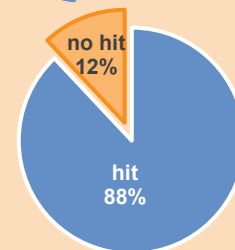
With the unique stereoselectivity of CHIRAL ART Cellulose-SZ, it is expected that success rate of chiral separation is improved.

CHIRAL ART Family Products

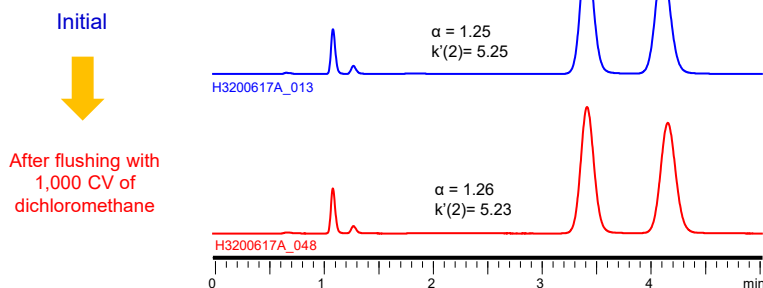
Type	Name	Chiral Selector
Immobilized	CHIRAL ART Amylose-SA	Amylose tris(3,5-dimethylphenylcarbamate)
	CHIRAL ART Cellulose-SB	Cellulose tris(3,5-dimethylphenylcarbamate)
	CHIRAL ART Cellulose-SC	Cellulose tris(3,5-dichlorophenylcarbamate)
	CHIRAL ART Cellulose-SJ	Cellulose tris(4-methylbenzoate)
	CHIRAL 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 will raise success rate!



Wide Range of Usable Solvents



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

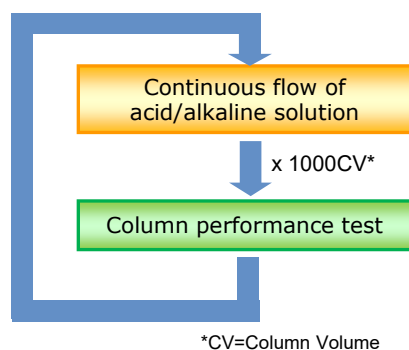
Retention rate of initial column performance (after flushing with 1,000 CV of each solvent at 40°C)

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

*CV=Column Volume

CHIRAL ART Cellulose-SZ has high resistance to various solvents. The change in column performance after exposure to each solvent was less than 2%.

Wide Usable pH Range



Continuous flow of acid/alkaline solution

Column : 5 μ m, 50 X 4.6 mmI.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]

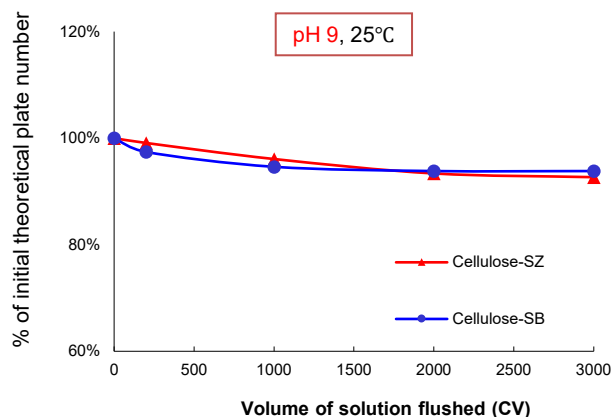
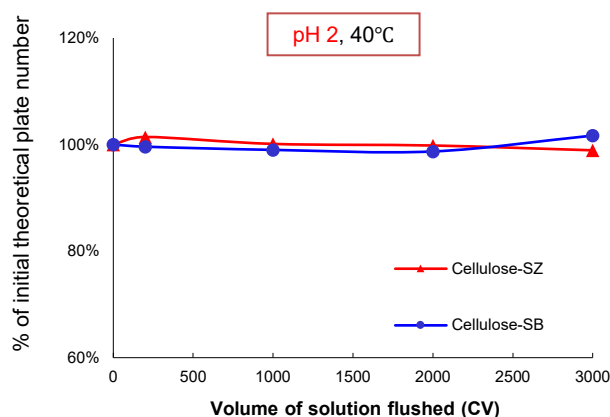
Buffer : 20 mM NH₄HCO₃-DEA* (pH 9)
 Temperature : 25°C

*DEA=diethylamine

Column performance test

Column : 5 μ m, 50 X 4.6 mmI.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 has excellent chemical durability and can be used across a wide range of pH. Cellulose-SZ offers stable and consistent performance in reversed phase mode.

YMC

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