

Temperature-responsive HPLC columns **New!**

*Aqua Way*TM series

Thermo-technology HPLC systems
to protect our environment

- 100% aqueous mobile phase
- Versatile separation performance

Configurations

	Catalogue No.	Description
Trial set	AWT001	The set contains 2 respective columns of 50mm x 4.6mm I.D. (<i>Aqua Way Philic</i> and <i>Cation</i>)

Catalogue No.	Pre-packed column			Bulk beads	
	4.6 mm I.D. x 50 mm	4.6 mm I.D. x 150 mm	4.6 mm I.D. x 250 mm	5 g	10 g
<i>Aqua Way Philic</i>	AWA046050	AWA046150	AWA046250	ABBA05	ABBA10
<i>Aqua Way Cation</i>	AWC046050	AWC046150	AWC046250	ABBC05	ABBC10

Supplementary data are available at
www.cellseed.com

*The silica beads' particle and pore size is 5 μm and 120 Å respectively.
*The specifications may change without prior notice.

CellSeed Inc. (Tokyo, Japan)

E-mail: info@cellseed.com

For general inquiries;

TEL: 81-3-5286-6231 FAX: 81-3-5286-6233

For technical inquiries;

TEL: 81-3-5155-6140

R-Bldg, 33-8, Wakamatsu-cho, Shinjuku-ku,
Tokyo, 162-0056, Japan

 **CellSeed**

www.cellseed.com

New product catalogue 2007-2008

Temperature-modulated reverse-phase HPLC column

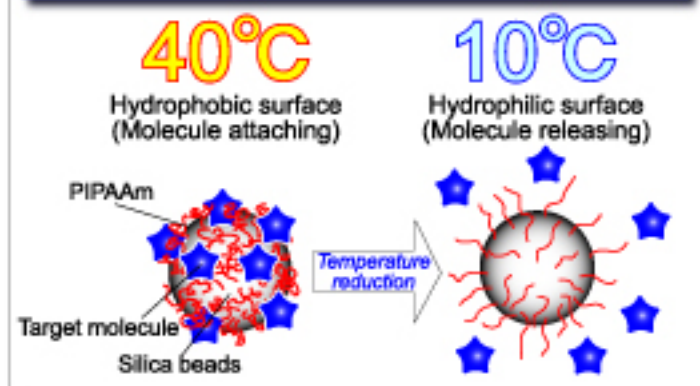
Aqua Way™ Philic



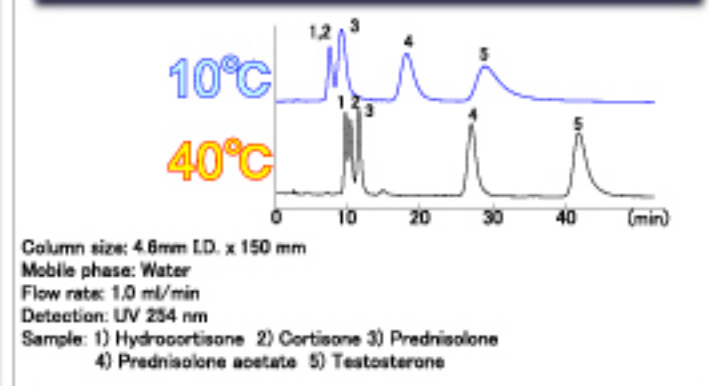
No more acetonitrile required for mobile phase! Environmentally friendly HPLC system!

- Temperature-responsive polymer (PIPAAm) is synthesized and grafted to aminopropyl silica.
- The surface of the grafted silica is hydrophobic at elevated temperatures and, as temperature decreases, transforms to hydrophilic surface properties.
- Separation selectivity and retention time are controlled by controlling column temperature.
- Higher the temperature, the longer the retention time.

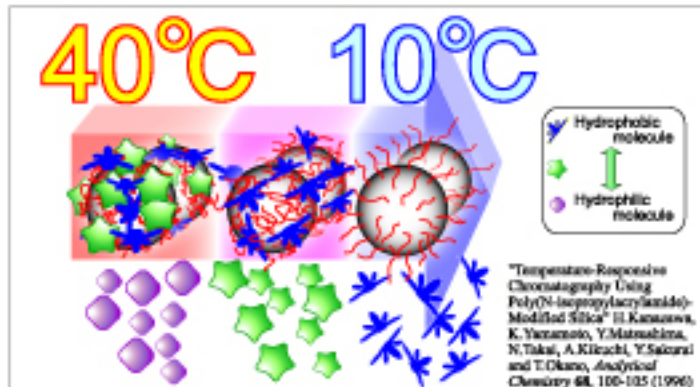
Mechanism of the temperature-responsive beads



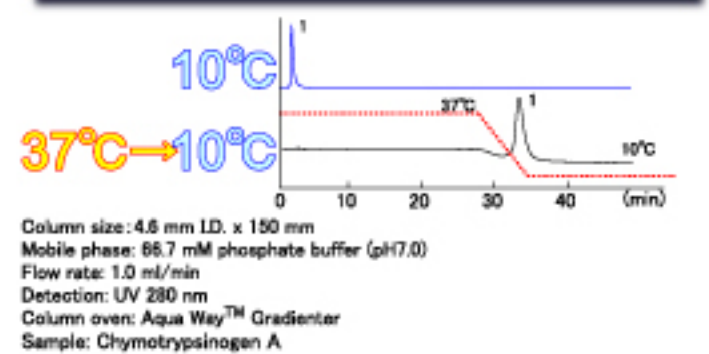
Separation of small molecules under 100% aqueous conditions



Experience the gradient elution-like effect by mere reduction of temperature!

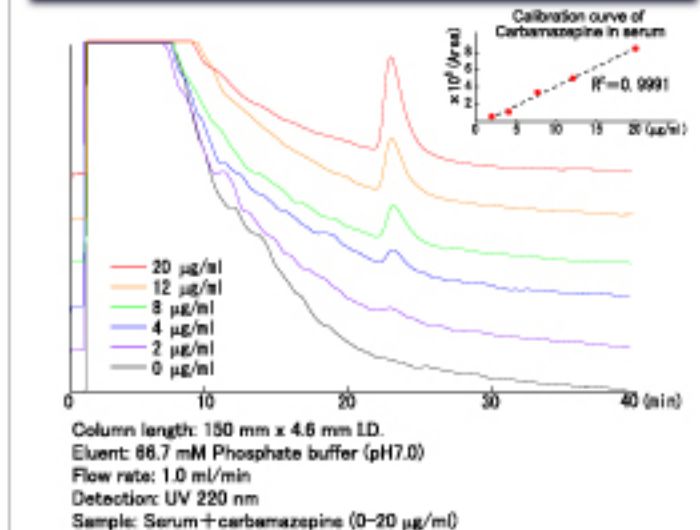


Separation of protein

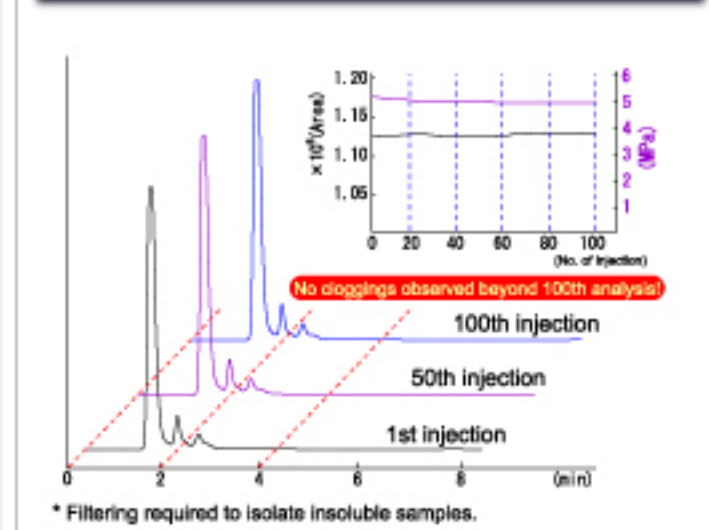


Direct analysis of human serum! Remarkable durability! Suitable for Therapeutic Drug Monitoring.

Quantitative analysis of Carbamazepine

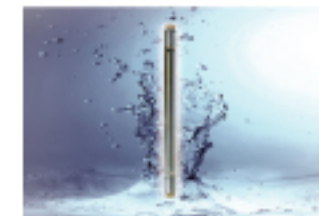


Durability analysis by column pressure and peak area



Thermally modulated cationic HPLC column

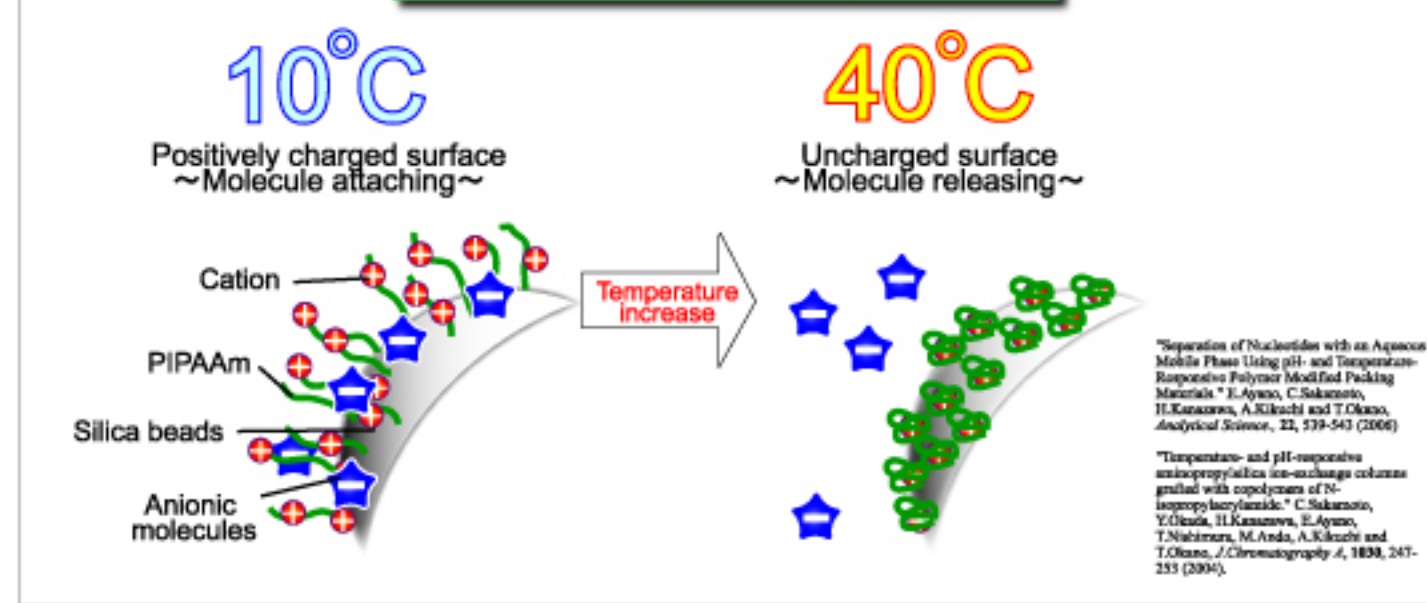
Aqua Way™ Cation



No gradient elution of high salt concentration needed! Avoid denaturation of targets!

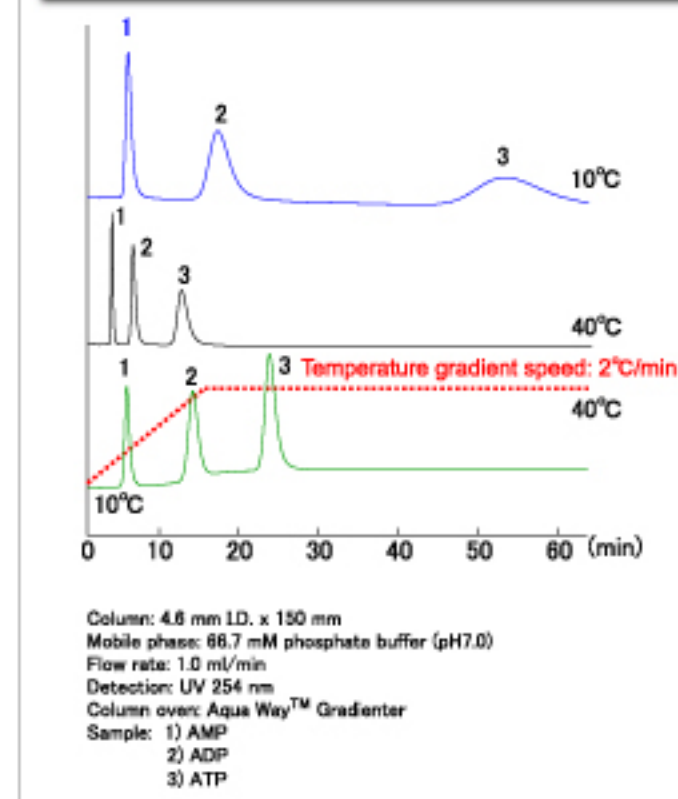
- Cationic temperature-responsive polymer is synthesized and grafted onto silica beads.
- The surfaces of the grafted silica show charge properties at lower temperature and, as temperature increases, transform to uncharged surface properties.
- Separation selectivity and retention are controlled by controlling column temperature.
- Lower the temperature, the longer retention time.

Mechanism of the temperature-responsive beads



Easy separation of anionic molecules

Easy separation of Nucleotides



Easy separation of NADP+ and NADPH

