

**NEW!**

# Hydrophobic Interaction Chromatography Column BioPro HIC HT

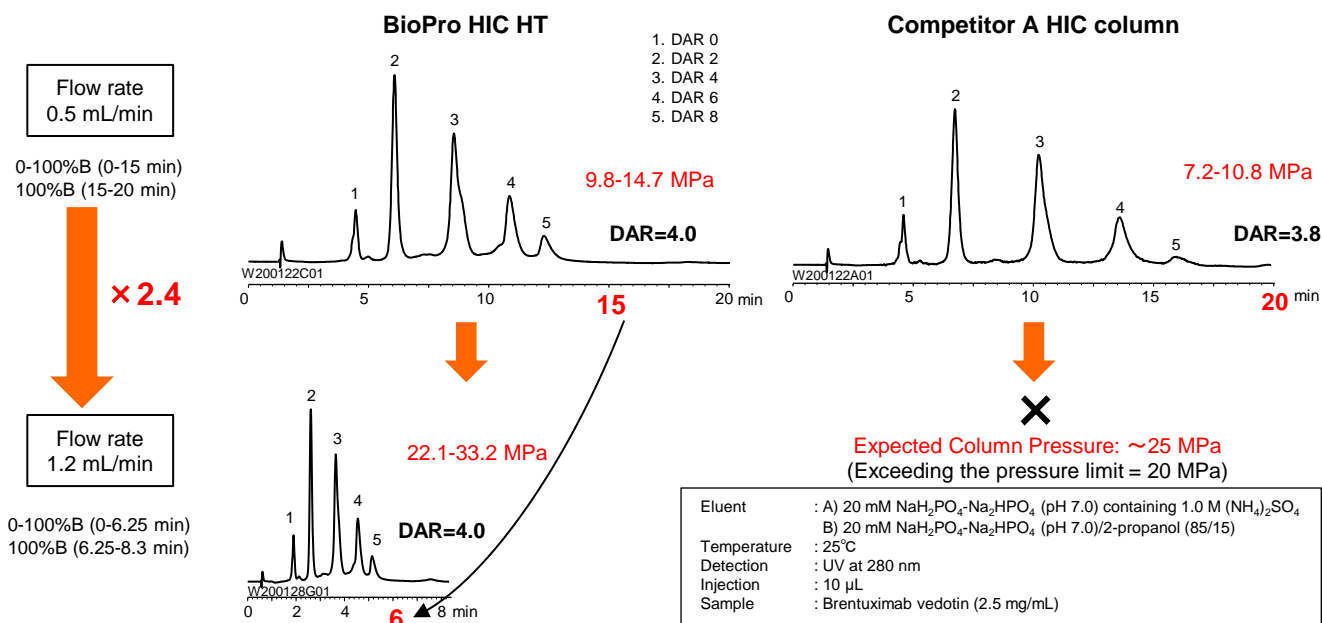
## Features

- Suitable for analysis of biopharmaceuticals such as antibody-drug conjugates (ADC's)
- High throughput by shortening analysis time
- Innovative surface chemistry leading to ideal drug-to-antibody ratio (DAR) analysis
- Excellent batch-to-batch reproducibility

## Specification

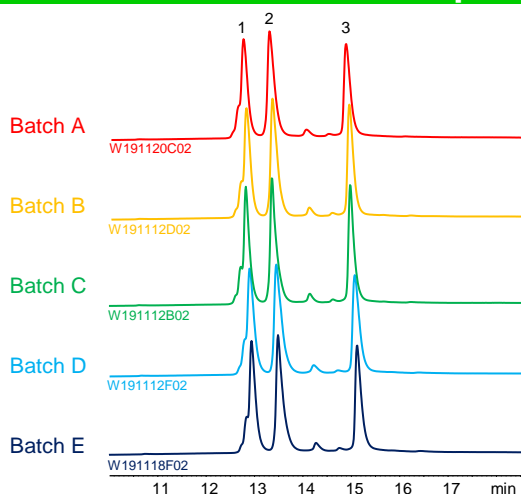
Matrix	: Hydrophilic non-porous polymer
Particle size	: 2.3 $\mu$ m
Bonded phase	: Butyl group
Usable temp. range	: 10-60°C
Usable pH range	: 2-12
Pressure limit	: 40 MPa

## High throughput by shortening analysis time under high flow rate condition



BioPro HIC HT consists of the fine non-porous polymer particle designed for separation of proteins, and has high pressure tolerance with excellent chromatographic resolution by optimized packing condition. This is capable of the rapid analysis without losing the resolution at a high pressure, which is too high to use with the other commercially available HIC column.

## Excellent batch-to-batch reproducibility



Column	: BioPro HIC HT 2.3 $\mu$ m, 100 X 4.6 mm.I.D.
Eluent	: A) 100 mM NaH <sub>2</sub> PO <sub>4</sub> -Na <sub>2</sub> HPO <sub>4</sub> (pH 7.0) containing 2.0 M (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> B) 100 mM NaH <sub>2</sub> PO <sub>4</sub> -Na <sub>2</sub> HPO <sub>4</sub> (pH 7.0) 0%B (0-1 min), 0-100%B (1-11 min), 100%B (11-15 min)
Flow rate	: 0.5 mL/min
Temperature	: 25°C
Detection	: UV at 280 nm
Injection	: 15 $\mu$ L
Sample	: 1. Adalimumab (0.5 mg/mL) 2. Trastuzumab (0.5 mg/mL) 3. Bevacizumab (0.5 mg/mL)

BioPro HIC HT exhibits an excellent batch-to-batch reproducibility. This is suitable for quality control analysis of biopharmaceuticals such as MAb's.

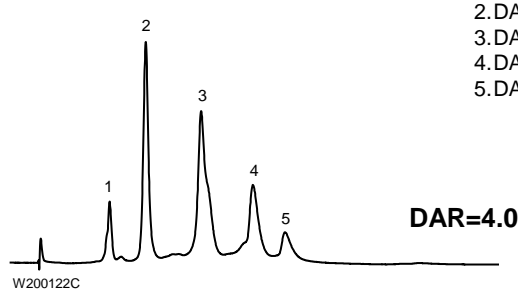
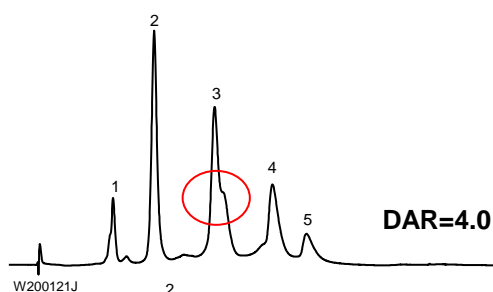
# Innovative surface chemistry for drug-to-antibody ratio (DAR) analysis

10% 2-propanol in Eluent B

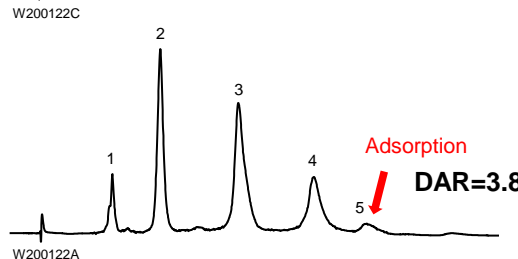
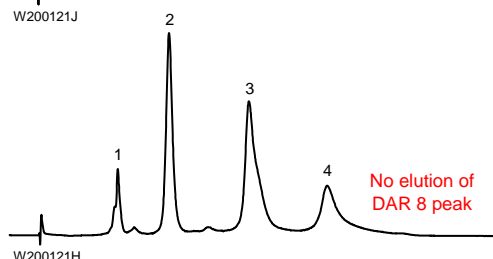
15% 2-propanol in Eluent B

1. DAR 0
2. DAR 2
3. DAR 4
4. DAR 6
5. DAR 8

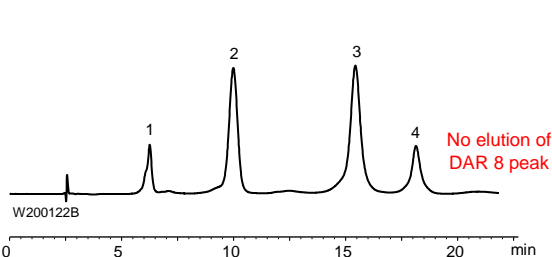
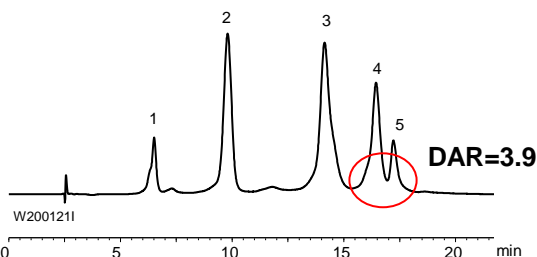
BioPro HIC HT



Competitor A  
HIC column



Competitor B  
HIC column



Column	: 100 X 4.6 mm.I.D.
Eluent	: A) 20 mM NaH <sub>2</sub> PO <sub>4</sub> -Na <sub>2</sub> HPO <sub>4</sub> (pH 7.0) containing 1.0 M (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> B) 20 mM NaH <sub>2</sub> PO <sub>4</sub> -Na <sub>2</sub> HPO <sub>4</sub> (pH 7.0)/2-propanol (90/10) or (85/15) 0-100%B (0-15 min), 100%B (15-20 min), 0%B (20-35 min)
Flow rate	: 0.5 mL/min
Temperature	: 25°C
Detection	: UV at 280 nm
Injection	: 10 µL
Sample	: Brentuximab vedotin (2.5 mg/mL)

The DAR analysis by using BioPro HIC HT and the competitor columns under two mobile phase conditions varying 2-propanol content was carried out. The competitor A column having high hydrophobicity did not elute the peak #5 completely with the mobile phase containing 2-propanol lower than 15%. The competitor B column eluted all peaks with the 10% 2-propanol mobile phase condition, but it showed the poor separation between the peaks #4 and #5. On the other hand, BioPro HIC HT eluted all peaks completely with the good separation, and another peak was partially separated on the peak #3. Additionally, it is noteworthy that the same DAR values were observed at any content of 2-propanol.

## [Ordering information]

Particle size (µm)	Column size Inner diameter X length (mm)	Product number
2.3	4.6 X 100	BHH00SQ3-1046PTH

Please inquire us for the product other than listed above.

### Worldwide Availability

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