

**NEW!**

For Monoclonal Antibody (MAb) Separation

# YMC-SEC MAB

**Features**

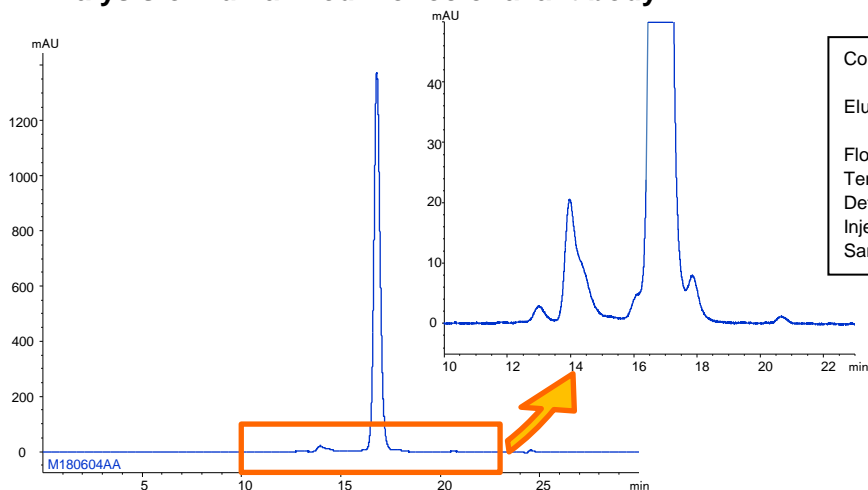
- Silica based SEC column optimized for MAb separation
- Suitable for separation of aggregates and fragments of MAb
- Excellent resolution and peak shapes

**Specifications**

Base	: Silica gel
Particle size	: 3 $\mu$ m
Pore size	: 250 Å
Functional group	: Dihydroxypropyl
Molecular weight range	: 10,000-700,000

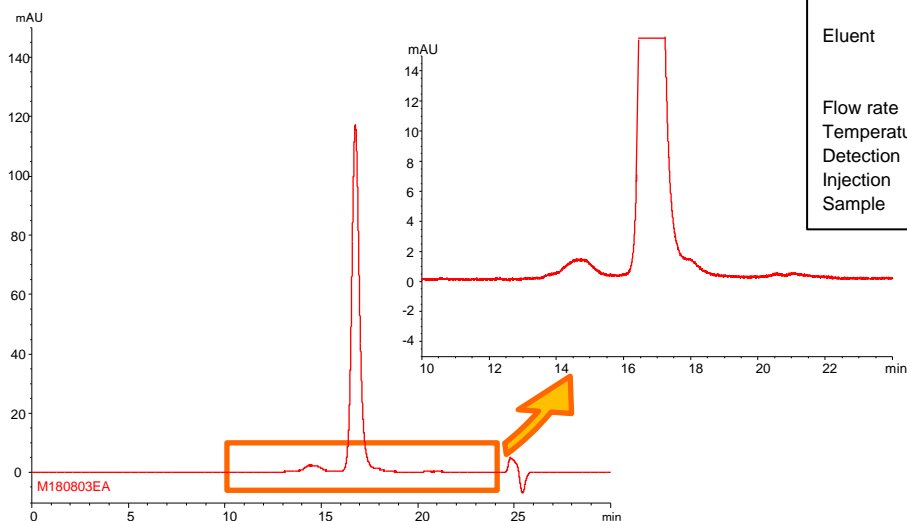
**Suitable for separation of aggregates**

**Analysis of humanized monoclonal antibody**



Column	: YMC-SEC MAB (3 $\mu$ m, 250 Å) 300 X 4.6 mm I.D.
Eluent	: 0.1 M KH <sub>2</sub> PO <sub>4</sub> -K <sub>2</sub> HPO <sub>4</sub> (pH 7.0) containing 0.2 M NaCl
Flow rate	: 0.165 mL/min
Temperature	: 25°C
Detection	: UV at 280 nm
Injection	: 10 $\mu$ L
Sample	: Humanized monoclonal antibody (5 mg/mL)

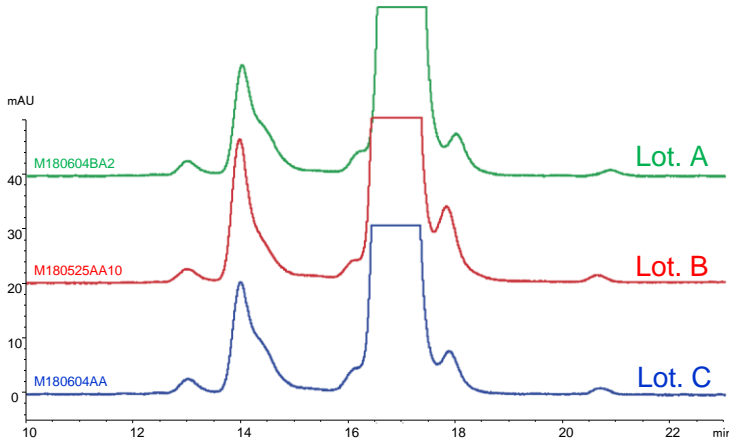
**Analysis of antibody-drug conjugate (ADC)**



Column	: YMC-SEC MAB (3 $\mu$ m, 250 Å) 300 X 4.6 mm I.D.
Eluent	: 0.1 M KH <sub>2</sub> PO <sub>4</sub> -K <sub>2</sub> HPO <sub>4</sub> (pH 7.0) containing 0.2 M NaCl/2-propanol (85/15)
Flow rate	: 0.165 mL/min
Temperature	: 25°C
Detection	: UV at 280 nm
Injection	: 4 $\mu$ L
Sample	: ADC mimic (2.5 mg/mL)

Humanized monoclonal antibody and ADC were analyzed using YMC-SEC MAB. Chromatograms show excellent peak shape, and good separation between aggregates and a monomer peak. YMC-SEC MAB is effective for characterization and quality control of antibody drugs.

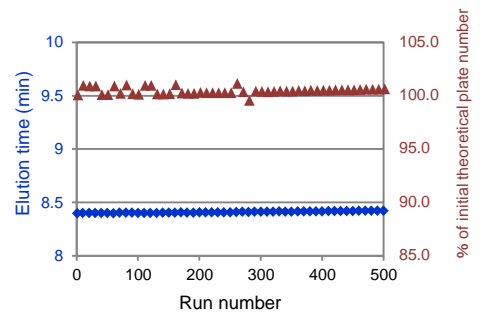
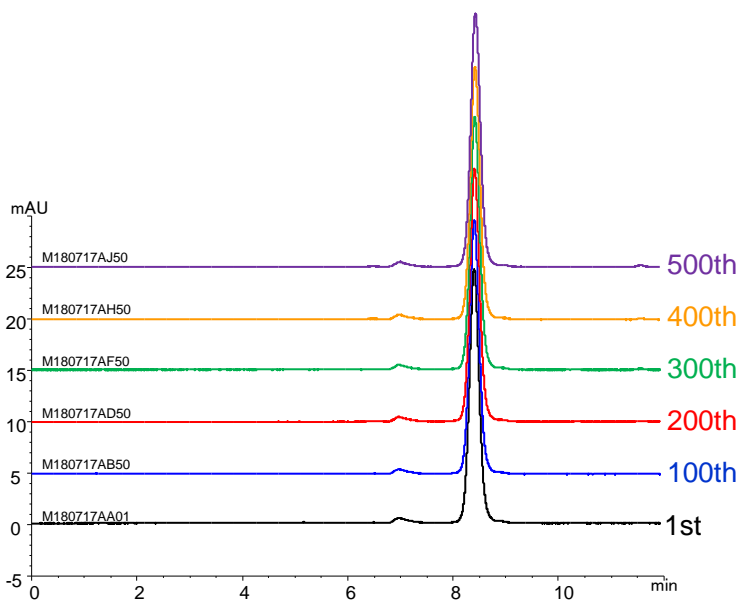
## Lot-to-lot reproducibility



Column : YMC-SEC MAB (3  $\mu$ m, 250  $\text{\AA}$ )  
 300 X 4.6 mm.I.D.  
 Eluent : 0.1 M  $\text{KH}_2\text{PO}_4$ - $\text{K}_2\text{HPO}_4$  (pH 7.0)  
 containing 0.2 M NaCl  
 Flow rate : 0.165 mL/min  
 Temperature : 25°C  
 Detection : UV at 280 nm  
 Injection : 10  $\mu$ L  
 Sample : Humanized monoclonal antibody (5 mg/mL)

A three-lot comparison is shown on the left. YMC-SEC MAB achieves excellent reproducibility of separation of monomer and aggregates as well as monomer and fragments and is effective for quality control.

## Excellent durability



Column : YMC-SEC MAB (3  $\mu$ m, 250  $\text{\AA}$ )  
 300 X 4.6 mm.I.D.  
 Eluent : 0.1 M  $\text{NaH}_2\text{PO}_4$ - $\text{Na}_2\text{HPO}_4$  (pH 7.0)  
 containing 0.2 M NaCl  
 Flow rate : 0.33 mL/min  
 Temperature : 25°C  
 Detection : UV at 280 nm  
 Injection : 2  $\mu$ L  
 Sample : Humanized monoclonal antibody (1 mg/mL)

YMC-SEC MAB can perform stable analysis and have excellent durability without any change of theoretical plate number and elution time even after more than 500 injections on monoclonal antibody analysis.

## 【Ordering information】

Particle size ( $\mu$ m)	Column size inner diameter X length (mm)	Product number
3	4.6 X 300	DLM25S03-3046WT

Please contact us about the product with other sizes.

### Worldwide Availability

**YMC America, Inc.**  
[www.ymcamerica.com](http://www.ymcamerica.com)

**YMC Europe GmbH**  
[www.ymc.de](http://www.ymc.de)

**YMC Switzerland LLC**  
[www.ymc-schweiz.ch](http://www.ymc-schweiz.ch)

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[www.ymcchina.com](http://www.ymcchina.com)

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