



# Shodex UB Series

## Bionanoproduct Analysis and Preparative Use Aqueous SEC column



# Shodex

### Features

- Particle pores are designed to target bionano-range products (virus, virus-like particles, exosomes etc.)
- Uniform particles achieved both low back pressure and high separation efficiency
- High stability against basic solvents and other chemicals commonly used in bioprocessing

Product Code	Product Name	Plate Number (TPN/column)	Particle Size (µm)	Target range	Column Size I.D. x L (mm)
F6429301	UB-50	≥3,500	26	< 50 nm	8.0 x 300
F6429302	UB-100	≥3,500	27	> 50 nm	8.0 x 300

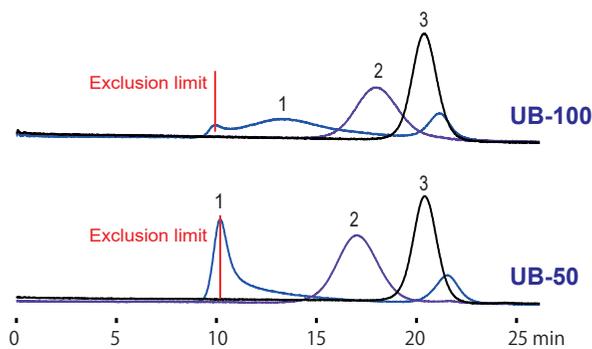
Packing Material: Polyhydroxymethacrylate  
Shipping Solvent: H<sub>2</sub>O

### Separation Capability

UB series particle pores are suitable separating bionanoproduct related components which include both high (aggregates) and low molecular weight impurities.

Sample: 10 µL

1. Dextran 5000 (particle size: 460 nm) 10 mg/mL
2. Hemocyanin (particle size: 37 nm) 0.4 mg/mL
3. BSA (particle size: 6 nm) 1.0 mg/mL



Column : Shodex UB-100, UB-50 (8.0 mm I.D. x 300 mm each)  
Eluent : 50 mM Sodium phosphate buffer (pH7.0) + 0.3 M NaCl  
Flow rate : 0.6 mL/min  
Detector : UV (280 nm)  
Column temp.: 25 °C

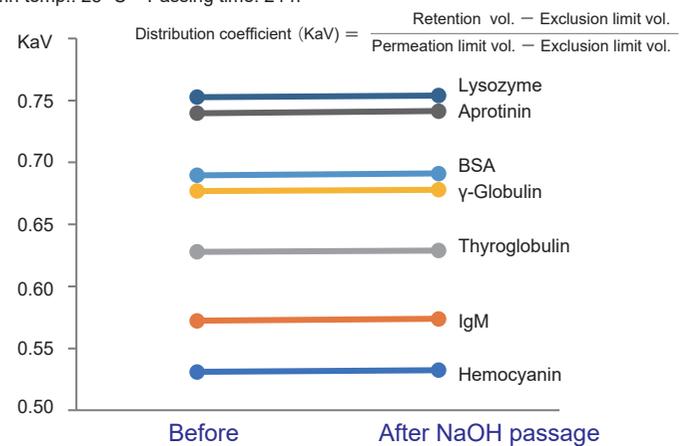
### Alkali Resistance

There was no variation in distribution coefficients of various proteins before and after passing NaOH aqueous solution.

Alkali resistance test conditions

Eluent: 1M NaOH aq. Flow rate: 0.25 mL/min

Column temp.: 25 °C Passing time: 24 h



Column : Shodex UB-100 (8.0 mm I.D. x 300 mm)  
Eluent : 50 mM Sodium phosphate buffer (pH7.0) + 0.3 M NaCl  
Flow rate : 0.6 mL/min  
Detector : UV (280 nm)  
Column temp.: 25 °C

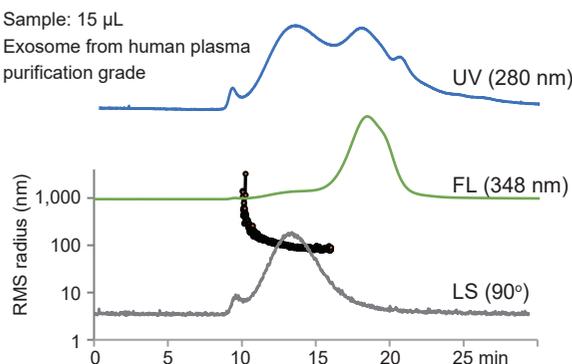
### Real Sample Applications

Advanced profiling can be achieved by combining various detection methods such as Fluorescence (FL) and Multi-angle light scattering (MALS), in addition to UV.

#### Exosome Analysis

Sample: 15 µL

Exosome from human plasma purification grade

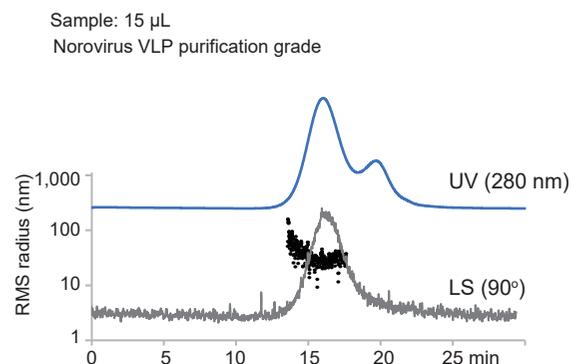


Column : Shodex UB-100 (8.0 mm I.D. x 300 mm)  
Eluent : PBS (-)  
Flow rate : 0.6 mL/min  
Detector : UV (280 nm) (small cell volume), FL (Ex. 280 nm, Em. 348 nm), MALS (DAWN 8+)  
Column temp.: Room temp.

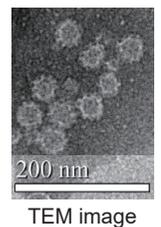
#### Norovirus VLP Analysis

Sample: 15 µL

Norovirus VLP purification grade



Column : Shodex UB-50 (8.0 mm I.D. x 300 mm)  
Eluent : PBS (-)  
Flow rate : 0.6 mL/min  
Detector : UV (280 nm) (small cell volume), MALS (DAWN 8+)  
Column temp.: Room temp.



### Manufactured by Resonac Corporation

To purchase, please contact a Shodex support office near you: <https://www.shodex.com/location/>

Figures and descriptions are provided to help you select appropriate columns. However, they do not guarantee nor warrant the suitability for your applications.

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