

# << Develosil Column >>

## TEST REPORT

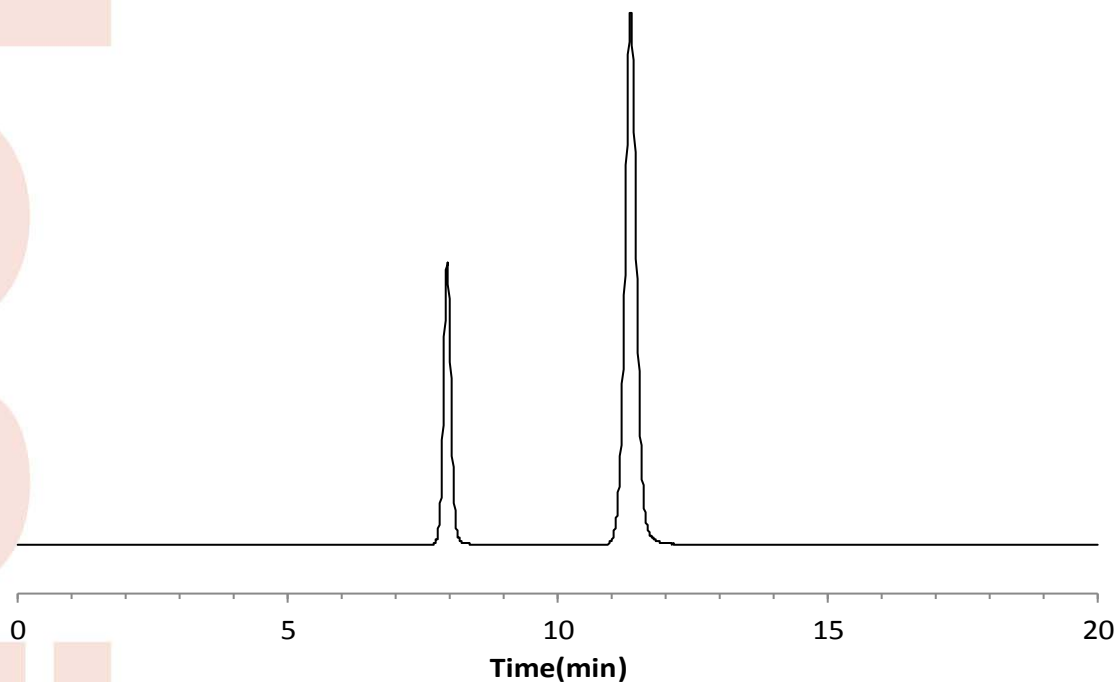
|                  |                |                |           |        |
|------------------|----------------|----------------|-----------|--------|
| Packings         | Develosil      | 100 Diol, 5 μm | Batch No. | 250316 |
| Column size      | Inner diameter | 4.6 mm         | Length    | 250 mm |
| End fitting type | NW             |                |           |        |
| Mfg. No.         | 29061866-BV    |                |           |        |

### Operating conditions

|              |   |                          |
|--------------|---|--------------------------|
| Mobile phase | : | Acetonitrile:water=30:70 |
| Flow rate    | : | 0.5 mL/min               |
| Column temp. | : | 30 °C                    |
| Pressure     | : | 3.4 MPa                  |
| Detection    | : | UV 254 nm                |

### Sample (Order of elution)

|   |             |
|---|-------------|
| 1 | Benzene     |
| 2 | Naphthalene |



Theoretical plate (Last peak)  $5.54 \times (t_R/W_{0.5})^2 = 13897$

Mobile phase at shipment: Acetonitrile:water=30:70

# Certificate of Analysis

Develosil 100Diol-5

Batch # 250316

## Analytical Results for Develosil 100Diol-5

|                                 |                           |              |
|---------------------------------|---------------------------|--------------|
| Analysis of Unbonded Silica Gel |                           | Result       |
| Median Particle Size            | [ $\mu\text{m}$ ]         | <b>5.09</b>  |
| Surface Area                    | [ $\text{m}^2/\text{g}$ ] | <b>351</b>   |
| Pore Volume                     | [ $\text{ml}/\text{g}$ ]  | <b>1.06</b>  |
| Median Pore Diameter            | [ $\text{nm}$ ]           | <b>10.94</b> |

※Median Particle Size was measured using Coulter Multisizer III, and Surface Area, Pore Volume and Median Pore Diameter were measured using Coulter SA3100.

## Analysis of Develosil 100Diol-5

|              |     |             |
|--------------|-----|-------------|
| Total carbon | [%] | <b>12.9</b> |
|--------------|-----|-------------|

## Chromatographic Results for Develosil 100Diol-5

| Analyte | Parameter | Specification | Result |
|---------|-----------|---------------|--------|
| BSA     | Recovery  | 90<           | 90     |

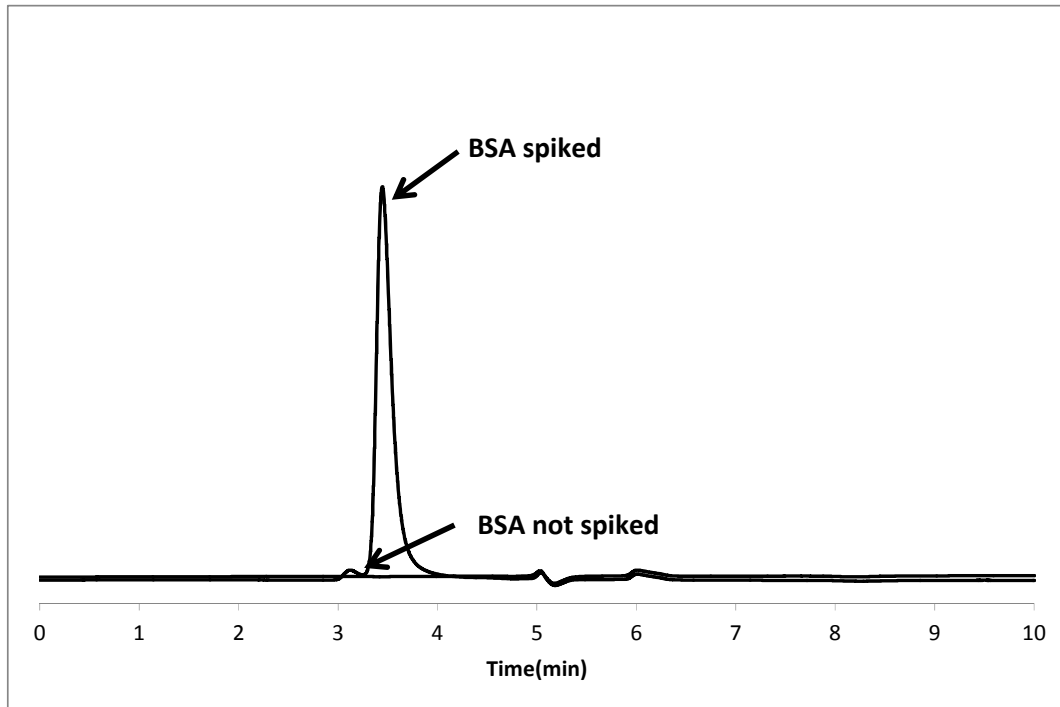


Fig. Chromatogram for BSA solution by HPLC

### Analytical conditions

Column: Develosil 100Diol-5 (4.6x250mm)  
 Mobile phase: 150mM Ammonium Phosphate(pH7.0)  
 Flow rate: 0.5ml/min  
 Wave length: 220nm  
 Sample: BSA  
 Injection volume: 20uL