## Analysis of Insulin Human According to JP Method (KW-802.5)

According to JP (Japanese Pharmacopoeia) method, high-molecular proteins in insulin human (genetical recombination) should be analyzed using a column packed with hydrophilic silica gel. It is necessary for the system suitability to satisfy the ratio,  $H_1/H_2 \ge 2.0$ . Where  $H_1$  represents the peak height of the dimer and  $H_2$  represents the height of the bottom between the peaks of the dimer and the monomer. It was confirmed that  $H_1/H_2$  was more than 30 when they were analyzed using PROTEIN KW-802.5.



 $\text{Sample}:100 \mu \text{L}$ 

- 4.0mg/mL of human Insulin containing dimer (in 0.01N HCl aq.)
- 1. High molecular weight proteins
- 2. Insulin trimer
- 3. Insulin dimer
- 4. Insulin monomer

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Column : Shodex PROTEIN KW-802.5 (8.0mmI.D. x 300mm)
Eluent : 0.1wt% L-Arginine aq./CH<sub>3</sub>CN/CH<sub>3</sub>COOH=13/4/3
Flow rate : 0.5mL/min
Detector : UV(276nm)
Column temp. : 25°C
```



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MZ-Analysentechnik GmbH, Barcelona-Allee 17• D-55129 Mainz Tel +49 6131 880 96-0, Fax +49 6131 880 96-20 e-mail: info@mz-at.de, www.mz-at.de