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OPERATING CONDITIONS and SPECIFICATIONS

TSKgel® BioAssistQ

Part Numbers:	0019685	4.6 mm ID x 5.0 cm L	PEEK Column	10 µm
	0021410	10.0 mm ID x 10.0 cm L	PEEK Column	13 µm

This sheet contains the recommended operating conditions and the specifications for **TSKgel** Bioassist Q columns. Installation instructions and column care information are described in a separate Instruction Manual.

A. OPERATING CONDITIONS

- Shipping Solvent: 20% Ethanol in 20 mM Tris-HCl buffer (pH 8.0, 4.6 mm ID x 5.0 cm L)
10% Ethanol in 20 mM Tris-HCl buffer (pH 8.0, 10.0 mm ID x 10.0 cm L)
- Max. Flow Rate: 1.2 mL/min 0019685
5.0 mL/min 0021410
NOTE: When a buffer with high viscosity is used, the maximum flow rate may have to be reduced so as not to exceed the maximum pressure drop. When changing solvents, use a flow rate equal to 25% of the maximum flow rate.
- Standard Flow Rate: 0.3 - 1.0 mL/min 0019685
1.0-5.0 mL/min 0021410
- Max. Pressure: 2.5 MPa
- pH Range: 2 - 12 less than one month
3 - 10 more than one month
- Salt Conc.: ≤ 2.5 Molar
- Organic Conc.: ≤ 30%
- Temperature: 4 - 60°C
- Cleaning Solvents: (1) 0.1 - 0.5 M NaOH,
(2) 20 - 40% acetic acid aqueous
(3) Aqueous buffer in 30% acetonitrile or methanol,
(4) 0.5 M NaOH + 30% Ethanol
(5) 8 M Urea, or 6 M Guanidine or nonionic surfactant in buffer.
NOTE: Clean the column regularly by injecting up to one column volume 0.1 - 0.5 M NaOH in 250 µl increments. Column cleaning could be also performed in reverse direction at ~ 25 % standard flow rate.
- Storage: The column can be stored in mobile phase for short periods. For longer term storage, use 20% aqueous ethanol in 20 mM Tris-HCl buffer (pH 8.0). Prevent air from entering the column, and keep it from drying out.
- Solvent Compatibility: Avoid long term (longer than one month) exposure to concentrated alkali or acid solutions.
- Connection of Column: Connect the PEEK column with a 10-32 polymer nut and ferrule.

B. SPECIFICATIONS

The performance of **TSKgel** Bioassist Q columns is tested under the conditions described in the Data Sheet. All columns have passed the following quality control specifications

Number of Theoretical Plates (N):	≥ 500	4.6 mm ID x 5.0 cm L
	500 - 3000	10.0 mm ID x 10.0 cm L
Asymmetry Factor (AF):	0.9 - 1.8	4.6 mm ID x 5.0 cm L
	0.8 - 1.8	10.0 mm ID x 10.0 cm L