

Published in February, 2012

Supplemental Information related to TSK-GEL RPC Columns / TSK-GEL NPC Columns

INSTRUCTION MANUAL for TSKgel Protein C4-300

To help protect you and/or your property from potential damage and ensure personal safety, please read the "Precautions" which are printed in the beginning of the "TSK-GEL RPC Columns / TSK-GEL NPC Columns" INSTRUCTION MANUAL thoroughly before using the above TSKgel Protein C4-300 column.

For this TSKgel Protein C4-300 column, please read section 1 (Table 1), section 3, section 6 (2), section 7 (Table 2), section 8, section 11 (Table 4), and section 13 (Table 8) on this supplemental information sheet instead of the corresponding sections you find on the "TSK-GEL RPC Columns / TSK-GEL NPC Columns" INSTRUCTION MANUAL.

Precautions: Shipping Solvents

Please refer to the "Precautions: Shipping Solvents" which are printed in the beginning of the "TSK-GEL RPC Columns / TSK-GEL NPC Columns" INSTRUCTION MANUAL.

Precautions: Packing Material

- Modified silica gel
TSKgel Protein C4-300

1. General Information

This TSKgel Protein C4-300 column is suitable for reversed phase chromatography of biomolecules such as proteins and peptides.

In this supplemental information sheet, only those instructions different from the other TSK-GEL RPC/NPC Columns are included. Please refer to the "TSK-GEL RPC Columns / TSK-GEL NPC Columns" INSTRUCTION MANUAL regarding instructions which are not mentioned in this document.

Table 1 Descriptions of TSK-GEL RPC/NPC Columns

Type	Description	Shipping Solvent	Application
TSKgel Protein C4-300	Fully capped, C4 bonded silica gel	CH ₃ CN	Proteins, Peptides

3. Column Parts

The structure of TSKgel Protein C4-300 column is the same as that of "TSKgel Super-ODS, TSKgel Super-Octyl, TSKgel Super-Phenyl and Semi-micro column".

6. Solvent Selection and Preparation

- (2) Keep the pH range of the solvent within pH 1.5 ~ 7.5 for this TSKgel Protein C4-300 column. The column life may be reduced if the column is operated near the pH limit.

7. Flow Rate

Table 2 Maximum Pressure

Part No.	Type	Column Size mm(I.D.)×cm(L)	Maximum Pressure (MPa)
0022830	TSKgel Protein C4-300	2.0×5	15.0
0022831	"	2.0×10	22.5
0022832	"	2.0×15	30.0
0022827	"	4.6×5	10.0
0022828	"	4.6×10	17.5
0022829	"	4.6×15	25.0

8. Temperature

The optimal operating temperature for TSKgel Protein C4-300 column is 10 °C ~ 50 °C.

11. Guard Column

11-2 Type and Selection of Guard Columns

Table 4 Cartridge Column

Part No.	Type	Column Size mm(I.D.)×cm(L)	Applied Column mm(I.D.)×cm(L)
0022834	TSKgel guardgel Protein C4	2.0×1	TSKgel Protein C4-300 (2.0×5, 2.0×10, 2.0×15)
0022833	TSKgel guardgel Protein C4	3.2×1.5	TSKgel Protein C4-300 (4.6×5, 4.6×10, 4.6×15)

Note : Three cartridge columns are packed in a box.

Shipping solvent : CH₃CN

13. Quality Specification and Warranty

13-3 Warranty

Table 8 Guaranteed Specifications

Part No.	Type	Column Size mm(I.D.)×cm(L)	Number of Theoretical Plates (TP/Column)	Asymmetry Factor
0022830	TSKgel Protein C4-300	2.0×5	4,500	0.90~1.35
0022831	"	2.0×10	10,000	0.90~1.30
0022832	"	2.0×15	15,500	0.90~1.30
0022827	"	4.6×5	6,000	0.90~1.35
0022828	"	4.6×10	11,500	0.90~1.30
0022829	"	4.6×15	17,000	0.90~1.30

14. Column Cleaning Solutions

14-1 Silica based columns

The TSKgel Protein C4-300 column should be cleaned as shown in (1).

TOSOH CORPORATION
BIOSCIENCE DIVISION