INSTRUCTIONS



ProFoldin 10 Technology Drive, Suite 40, Number 188 Hudson, MA 01749-2791 USA Tel: (508) 735-2539 Fax: (508) 845-9258 www.profoldin.com info@profoldin.com

ProFoldin Desalting Columns for Protein and DNA Samples

Micro Desalting Spin Column Set Catalog number: MDC050

INTRODUCTION

ProFoldin desalting columns are designed to remove small molecules like salts, free enzyme substrates or ligands from a protein or DNA solution. After desalting, the protein or DNA sample is in a low-salt buffer composed of 10 mM Tris-HCl, pH 7.5. The columns can also be used for buffer exchange of protein or DNA samples to a desired buffer which is used to pre-equilibrate the column. The principle of desalting is size-exclusion chromatography with a molecular cut-off of 5 kDa. The residual salt concentration in the desalted solution is less than 2 % of the original salt concentration. The protein recovery yield is 98 % or higher.



The **Micro Desalting Spin Columns Set** (Catalog number: MDC050) contains 50 pre-packed spin-columns. Each column is to desalt 25 to 50 µl of sample.

DESALTING OR BUFFER EXCHANGE PROCEDURE

1. Spin the pre-packed columns at 3200 rpm (1000 x g) for 1 min using a bench-top microcentrifuge to set down the resin. Remove the column bottom tips and caps. Place the columns into 1.5 ml-eppendorf tubes and spin the columns at 3200 rpm for 2 min.

2. If the protein is to be buffer-exchanged to a specific buffer rather than 10 mM Tris-HCl, pH 7.5, add 250 μ l of the specific buffer and spin the columns 3200 rpm for 2 min.

- 3. Transfer each column into a clean labeled 1.5-ml eppendorf tube.
- 4. Load 25 μ l of the sample onto each spin column and spin the columns at 3200 rpm for 4 min. Save the desalted samples.