## 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 sizeexclusion 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 $50 \mu \mathrm{l}$ of sample.

## DESALTING OR BUFFER EXCHANGE PROCEDURE

1. Spin the pre-packed columns at $3200 \mathrm{rpm}(1000 \mathrm{xg})$ 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- $\mathrm{HCl}, \mathrm{pH} 7.5$, add 250 $\mu \mathrm{l}$ of the specific buffer and spin the columns 3200 rpm for 2 min .
3. Transfer each column into a clean labeled $1.5-\mathrm{ml}$ eppendorf tube.
4. Load $25 \mu \mathrm{l}$ of the sample onto each spin column and spin the columns at 3200 rpm for 4 min . Save the desalted samples.
