INSTRUCTIONS

ZebaTM 96-well Desalt Spin Plate



89807 89808

1781.0

Description Number

89807

89808

ZebaTM 96-well Desalt Spin Plate, 2 pack, each well contains ~550 µl resin slurry in 0.05% sodium azide and can process 20-100 µl samples; package contains two wash plates and two collection plates

ZebaTM 96-well Desalt Spin Plate, 4 pack, each well contains ~550 µl resin slurry in 0.05% sodium azide and can process 20-100 µl samples; package contains two wash plates and four collection plates

Note: The ZebaTM Plate is recommended for processing compounds > 7,000 Da Storage: Upon receipt store at 4°C. Product shipped at ambient temperature.

Introduction

The ZebaTM 96-well Desalt Spin Plates contain a resin that offers high-performance desalting and protein recovery characteristics for multiple sample processing. Sample volumes from 20 to 100 μ l can be processed with > 95% retention of salts and other small molecules (< 1,000 Da) and exceptional protein recovery. One plate containing 96 samples can be desalted in 5 minutes, enabling processing of multiple samples for downstream analysis, such as mass spectrometry, HPLC, capillary electrophoresis, metabolite screening and assay development. The resin is supplied ready to use with no hydrating or dispensing required.

Additional Materials Required

- Variable-speed centrifuge with rotor and carriers capable of handling stacked plates (4.4 cm height) at $1,000 \times g$
- Multi-channel pipettor and tips

Procedure for Desalting or Removing Small Molecules

Note: To process > 96 samples, evenly divide samples among two plates in Step 7. To process \leq 96 samples, balance the centrifuge by using an unprocessed plate with the top and bottom seal in place.

- 1. Equilibrate Zeba[™] 96-well Desalt Spin Plates to room temperature.
- Use the tab to remove the sealing material from the bottom of the plate. Place the desalt plate on top of a wash plate. 2.
- 3. Remove the sealing material from the top of the desalt plate.
- 4 Place the assembly into a centrifuge with 96-well plate-carrier rotor and centrifuge at $1,000 \times g$ for 2 minutes to remove the storage buffer. Discard the flow-through.
- 5. Rinse the wash plate three times with deionized water, dry and save for future use.
- 6. Stack the desalt plate on top of a sample collection plate (blue), aligning the alphanumeric indices on the plates.
- 7. Apply sample (20-100 µl) to the center of the resin bed. To expel the entire sample, carefully touch pipette tip to the resin. For 20 μ l protein samples (> 300 μ g/ml), apply a 20 μ l stacker of water or buffer on top of the resin bed after the sample has fully absorbed to ensure maximal protein recovery.
- 8. Centrifuge the plate assembly at $1,000 \times g$ for 2 minutes to collect the desalted sample. Discard the desalt plate or reserve it for future balancing purposes.

Warranty: Pierce Biotechnology products are warranted to meet stated product specifications and to conform to label descriptions when stored and used properly. Unless otherwise stated, this warranty is limited to one year from date of sale when used according to product instructions. Pierce Biotechnology's sole liability for the product is limited to replacement of the product or refund of the purchase price. Unless otherwise expressly authorized in writing by Pierce Biotechnology, Pierce products are supplied for Research Use Only and are intended to be used by a technically qualified individual. Pierce Biotechnology's quality system is certified to ISO 9001. Pierce Biotechnology products are not produced in accordance with FDA's current Good Manufacturing Practices. Pierce Biotechnology strives for 100% customer satisfaction. If you are not satisfied with the performance of a Pierce Biotechnology product, please contact Pierce Biotechnology or your local distributor.



Procedure for Buffer Exchange

Note: To process > 96 samples, evenly divide samples among two plates in Step 7. To process \leq 96 samples, balance the centrifuge by using an unprocessed plate with the top and bottom seal in place.

- 1. Equilibrate the Zeba[™] 96-well Desalt Spin Plates to room temperature.
- 2. Use the tab to remove the sealing material from the bottom of the plate. Place the desalt plate on top of a wash plate.
- 3. Remove the sealing material from the top of the desalt plate.
- 4. Place the assembly into a centrifuge with a 96-well plate-carrier rotor and centrifuge at $1,000 \times g$ for 2 minutes to remove the storage buffer. Discard the flow-through.
- 5. Add 250 μ l of buffer on top of the resin bed. Centrifuge at 1,000 \times g for 2 minutes and discard the flow-through.
- 6. Repeat Step 5 three additional times. Rinse the wash plate three times with deionized water, dry and save for future use.
- 7. Stack the desalt plate on top of a sample collection plate (blue), aligning the alphanumeric indices on the plates.
- Apply sample (20-100 μl) to the center of the resin bed. To expel the entire sample, carefully touch pipette tip to the resin. For 20 μl protein samples (> 300 μg/ml), apply a 20 μl stacker of buffer on top of the resin bed after the sample has fully absorbed to ensure maximal protein recovery.
- 9. Centrifuge the plate assembly at $1,000 \times g$ for 2 minutes to collect processed sample. Discard the desalt plate or reserve it for future balancing purposes.

Troubleshooting

Problem	Possible Cause	Solution
Sample or buffer does not flow through resin	Centrifugation problem	Ensure that centrifuge is properly working
Sample contamination	Improper sample loading	Apply sample directly to the center of the resin bed; carefully touch pipette tip to resin to expel the entire sample
		Avoid contact with sides of the plate wells

Related Pierce Products

89877	Zeba TM Micro Desalt Spin Columns, 25 columns, for 2-12 µl samples
89882	Zeba TM Desalt Spin Columns, 0.5 ml, 25 columns, for 30-130 µl samples
89879	Handee TM Micro Spin Columns, 50 columns with screw caps, for 5-100 µl of resin
89868	Handee TM Mini-Spin Columns, 0.5 ml, 50 columns with screw caps
69574	Slide-A-Lyzer [®] MINI Dialysis Units, 10K MWCO, 10 units
23225	BCA TM Protein Assay Kit, sufficient to perform 500 standard tube assays
28372	BupHTM Phosphate Buffered Saline Packs, 40 packs
28376	BupHTM Tris Buffered Saline Packs, 40 packs
24600	SilverSNAP[®] Stain for Mass Spectrometry, sufficient reagents to stain 20 mini gels and destain > 500 gel pieces for subsequent elution and analysis by mass spectrometry
89871	In-Gel Tryptic Digestion Kit, sufficient reagents for approximately 150 in-gel digestions

BCATM Technology is protected by U.S. Patent # 4,839,295.

Current versions of product instructions are available at *www.piercenet.com*. For a faxed copy, call 800-874-3723 or contact your local distributor. ©Pierce Biotechnology, Inc., 2/2006. Printed in the USA.