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# **SpinOUT™ Spin Plates**

96-Well Plates for Desalting & Buffer Exchange from Peptide & Protein Solutions

(Cat. # 786-989, 786-990, 786-991, 786-992)



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#### INTRODUCTION

The SpinOUT<sup>™</sup> spin plates are versatile, spin-format, 96-well filter plates for the desalting and buffer exchange of protein and other macromolecule solutions ranging from 20µl through to 130µl sample volumes. The SpinOUT<sup>™</sup> spin plates are available in two MWCO sizes for >6,000 or >30,000 Dalton peptides or proteins and are suitable for samples containing as little as 20µg peptide or protein/ml.

The SpinOUT<sup>™</sup> spin plates are simple to use as the peptide or protein solution is applied and then centrifuged to recover protein with the column retaining >95% of the salts and small molecules (<1,000Da for SpinOUT<sup>™</sup> GT-600 and <1,500 for SpinOUT<sup>™</sup> GT-1200).

## **ITEMS SUPPLIED**

Cat. #	Description	Size	Wash/Collection Plates	Resin Bed Volume/well (μl)
786-989	SpinOUT™ GT-600 Spin Plate	2 plates	4 plates	500
786-990	SpinOUT™ GT-600 Spin Plate	4 plates	6 plates	
786-991	SpinOUT™ GT-1200 Spin Plate	2 plates	4 plates	
786-992	SpinOUT™ GT-1200 Spin Plate	4plates	6 plates	

## STORAGE CONDITIONS

The plates are shipped at ambient temperature. Upon arrival, store at 4°C. If stored and handled correctly the plates have a shelf-life of 1 year.

## **SPECIFICATIONS**

# SpinOUT™ GT-600

Particle size: 20-130μm
 Exclusion limit (M<sub>r</sub>): 6,000

# SpinOUT™ GT-1200

Particle size: 35-200μm
 Exclusion limit (M<sub>r</sub>): 30,000

#### IMPORTANT INFORMATION

- Plates are compatible with variable speed centrifuges with rotors and carriers capable of handling stacked plates. Use speed of 500-1,000xg with a maximum of 1,000xg.
- Ensure the spin plates are balanced throughout all centrifugations with a duplicate plate filled with an appropriate volume of water.

# Sample Load Volume

The recommended load volumes ( $20-130\mu$ l) are a guideline. The actual volumes used will be dependent on your sample, the concentration of salrs and contaminants to be removed and the recovered purity desired. For optimal removal of contaminants, we recommend using a sample volume of <20% of the resin bed volume.

**NOTE:** Loading more than the recommended load volume will result in a higher level of contaminating salts and other molecules.

**NOTE:** To process >96 samples, evenly divide samples between 2 plates.

# **ADDITIONAL ITEMS NEEDED**

- Variable speed centrifuge with rotor and carriers capable of handling stacked plates
   (4.5cm height) at 500xg or a vacuum manifold.
- Multi-channel pipettor and tips
- Buffer for buffer-exchange
- Equilibration Buffer: Any aqueous buffer, pH6.5-8.

## PROTOCOL: PROTEIN DESALTING

- 1. Equilibrate the SpinOUT™ Spin Plate to room temperature.
- 2. Remove the seal from the bottom of the plate and place on top of a wash/collection plate.
- 3. Remove the seal from the top of the plate.
- 4. Place the plate assembly in a centrifuge with a 96-well plate carrier and centrifuge at 1,000xg for 1 minute to remove the storage buffer. Discard the storage buffer.
- 5. Rinse the wash plate with deionized water, dry and save for future use.
- 6. Place the desalting plate on a new wash/collection plate and apply  $20-130\mu$ l sample to the center of the resin.
  - **NOTE:** Touch the tip to the resin to expel all the sample. For 20µl protein samples (>300µg/ml), apply a 20µl stacker of water or buffer on top of the resin bed after the sample has fully absorbed to ensure maximal protein recovery.
- 7. Place the plate assembly in a centrifuge with a 96-well plate carrier and centrifuge at 1,000xg for 2 minutes to collect the desalted sample.
  - **NOTE:** Discard the SpinOUT<sup>™</sup> plate or save for future use as a balance blank.

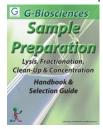
# PROTOCOL: BUFFER EXCHANGE

- 1. Equilibrate the SpinOUT™ Spin Plate to room temperature.
- Remove the seal from the bottom of the plate and place on top of a wash/collection plate.
- 3. Remove the seal from the top of the plate.
- 4. Place the plate assembly in a centrifuge with a 96-well plate carrier and centrifuge at 1,000xg for 1 minute to remove the storage buffer. Discard the storage buffer.
- 5. Add 250µl of buffer to the resin bed. Centrifuge at 1,000xg for 2 minutes and discard the flow-through. Repeat this step three more times.
- 6. Rinse the wash plate with deionized water, dry and save for future use.
- 7. Place the desalting plate on a new wash/collection plate and apply 20-130 $\mu$ l sample to the center of the resin.
  - **NOTE:** Touch the tip to the resin to expel all the sample. For 20µl protein samples (>300µg/ml), apply a 20µl stacker of water or buffer on top of the resin bed after the sample has fully absorbed to ensure maximal protein recovery.
- 8. Place the plate assembly in a centrifuge with a 96-well plate carrier and centrifuge at 1,000xg for 2 minutes to collect the desalted sample.

**NOTE:** Discard the SpinOUT<sup>™</sup> plate or save for future use as a balance blank.

#### RELATED PRODUCTS

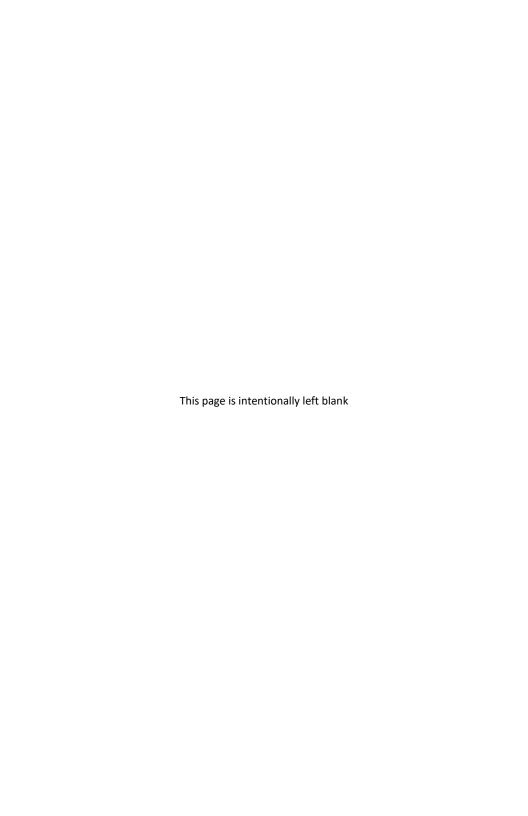
Download our Sample Preparation Handbook



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