

# Ultra-Micro SpinColumns™

(5 to 25 µl Sample Volume)



a brand of Harvard Bioscience, Inc.

## Quick Start Guide

Ultra-Micro SpinColumns provide rapid purification of small samples. Centrifugation or filtration under vacuum pressure can be used to run the sample through the columns. Alternatively, Ultra-Micro SpinColumns may be used as Ultra-Micro TipColumns™ by passing the sample through the column using a micro-pipette. Each package includes two 2 ml centrifuge tubes, and top caps (for gel filtration) or frit. Available with our complete range of packing materials or pre-packed with custom requested materials.

### Instructions for use as SpinColumns

1. Place the column into a centrifuge tube. For gel filtration media, tap the column gently to ensure that the media is settled at the bottom and remove the blue cap.
2. Place 75 µl of water or buffer in the column and wait 10 minutes for hydration.
3. Centrifuge for 2 to 3 minutes at approximately 1000 x g.
4. Repeat Steps 2 and 3 if needed to form a compact gel.
5. Remove column from tube and blot the exterior dry.
6. Add between 5 µl and 25 µl of sample to the column.
7. Place the column in a new centrifuge tube and spin for 2 to 3 minutes at approximately 1000 x g.

#### For size exclusion applications:

- a) The purified sample is collected in the centrifuge tube.

#### For solid-phase extraction technique:

- a) Unbound sample components are removed. Place column into a new centrifuge tube, add elution buffer and centrifuge to recover desired sample.

#### For Detergent Removal Applications:

- a) Load 5 to 25 µl of sample into the column.
- b) Let stand at room temperature for 10 to 15 minutes.
- c) Centrifuge to collect purified sample.

### Ordering Information

Empty SpinColumns		
Frit	Qty. of 24	Qty. of 96
5 µm frit	74-4421	74-4420
20 µm frit	74-4401	74-4400
40 µm frit	74-4431	74-4430



### Instructions for use as TipColumns

1. For Gel Filtration media, tap the column gently to ensure that the media is settled at the bottom and remove the blue cap.
2. Place 150 µl of water or buffer in the column and wait 10 minutes for hydration.
3. Dispense excess liquid.
4. Add between 5 µl and 25 µl of sample to the column.

#### For size exclusion applications:

- a) Aspirate sample into tip or add to top of tip.
- b) Dispense unbound sample.
- c) Repeat steps a) and b) as necessary to further remove unbound sample components.
- d) Add elution buffer and collect purified sample.

#### For detergent removal applications:

- a) Aspirate 5 to 25 µl of sample into the tip.
- b) Let stand at room temperature for 10 to 15 minutes.
- c) Dispense to collect the purified sample.

*Micro SpinColumns are intended for single use only.*

## Ordering Information

Filled SpinColumns		
Media Type	Qty. of 24	Qty. of 96
<b>Ion Exchange</b>		
Strong Anion Q	74-7233	74-7213
Weak Anion PEI	-	74-4423
Weak Anion DEAE	74-7234	74-7214
Strong Cation SA	74-4426	74-4425
Strong Cation SP	74-7235	74-7215
Weak Cation CM	74-7236	74-7216
Weak Cation AA	-	74-4427
<b>Gel Filtration</b>		
Sephadex, G-10 (700 D)	74-7220	74-7200
Sephadex, G-25 (5 kD)	74-7221	74-7201
Sephadex, G-50 (30 kD)	74-7222	74-7202
Sephadex, G-100 (100 kD)	74-7223	74-7203
Polyacrylamide, P-2 (2 kD)	74-7224	74-7204
Polyacrylamide, P-6 (6 kD)	74-7225	74-7205
<b>Hydrophilic (Normal Phase)</b>		
Amino (NH <sub>2</sub> )	74-7231	74-7211
Cyano (CN)	74-7230	74-7210
PHEA	74-7232	74-7212
Silica	74-7229	74-7209
<b>Hydrophobic (Reverse Phase)</b>		
C4	74-7228	74-7208
C8	74-7227	74-7207
C18	74-7226	74-7206
C18 Targa	74-7242	74-7243
<b>Misc.</b>		
Cellulose	74-7237	74-7217
Detergent Removal	74-7238	74-7218

**Key:**

Q = Quaternary Ammonium (Sephacrose, Fast Flow)  
 PEI = Linear Polyethyleneimine (Silica Based: Organic Compatible)  
 DEAE = Cross-Linked Diethylaminoethyl (Sephacrose)  
 PHEA = Hydrophilic Polyhydroxyethyl Aspartamide

SA = Sulfoethyl Aspartamide (Silica Based: Organic Compatible)  
 CM = Carboxymethyl 12  $\mu$ m, 300 Å (Sephacrose)  
 SP = Sulfopropyl (Sephacrose, Fast Flow)  
 AA = Aspartic Acid 20  $\mu$ m, 300 Å (Silica Based: Organic Compatible)