

## Zeba™

Micro Desalt Spin Columns

little things make an incredible difference

## There is great beauty in success.

Protein desalting is an established technique that researchers have used with little change for decades. Pierce has modernized protein-desalting applications by introducing Zeba™ Micro Desalt Spin Columns that allow you to process small sample volumes (2-12 µl), even at low-protein concentrations (25 µg/ml). These specially designed micro columns contain 50 µl of proprietary size-exclusion resin, exclusive to Pierce, to provide the ultimate protein recovery.

Not all resins are created equal (Figure 1). Despite claims, other commercially available resins perform only satisfactorily in spin columns with high concentration (>250 µg/ml) samples. In addition,

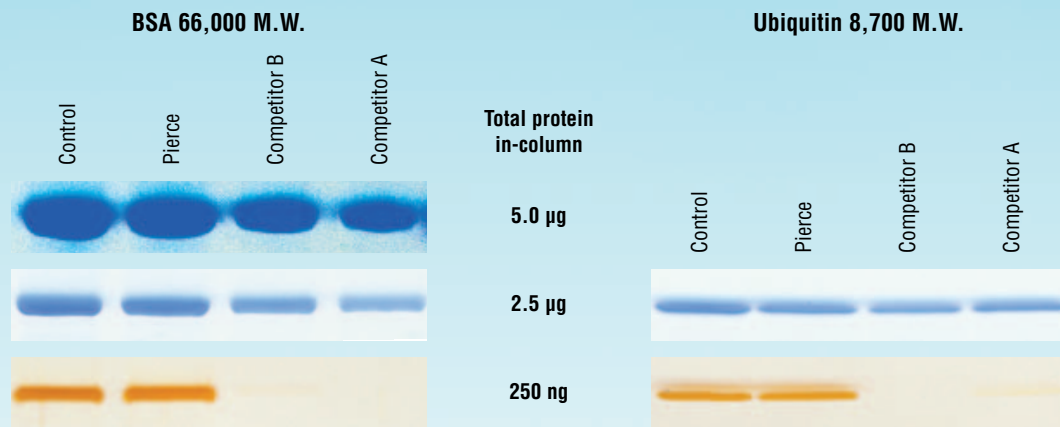
they accommodate only a narrow window of sample volumes. The proprietary high-performance resin of the Zeba™ Micro Desalt Spin Columns outperforms the competition (Figure 1 and Table 2). Zeba™ Micro Desalt Spin Columns have exceptional desalting characteristics with ≥95% retention of salts and other small molecules of <1,000 M.W. and are recommended for processing compounds >7,000 M.W. Zeba™ Micro Desalt Spin Columns accommodate small sample volumes of 2-12 µl.

Zeba™ Micro Desalt Spin Columns are supplied in two convenient packages of 25 and 50 columns. Each pack of columns includes complete and easy-to-follow instructions.



## Highlights:

- Multiple sample processing in *less than six minutes*
- *Exceptional protein recovery* (Table 2)
- Designed for use with *small sample volumes* of 2-12 µl
- No cumbersome column preparation or equilibration
- *No waiting* for samples to emerge by gravity flow
- Minimal sample dilution



**Figure 1. Protein recovery after sample processing with commercially available desalting resins in a micro-spin device.** Samples of bovine serum albumin (BSA) or ubiquitin at a variety of concentrations were desalted with Pierce high-performance desalting resin or the leading competitor's resin in Zeba™ Micro Spin Columns (Product # 89879) from Pierce. In all cases sample volume was 10 µl plus a 3 µl buffer stacker placed over the sample. Significantly less protein was recovered using the competitor's resin.

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Sample Prep

little things make an incredible difference

consistent fast accurate adaptable

Protein	Resin	% Recovery
BSA (66K M.W.)	Pierce	98
	Competitor B	47
	Competitor A	37
Ubiquitin (8.7K M.W.)	Pierce	76
	Competitor B	47
	Competitor A	50

**Table 1. Protein recovery after sample processing with commercially available desalting resins in a Zeba™ Micro Spin Column (Product # 89879).**

Samples of bovine serum albumin or ubiquitin at concentration of 250 ng/μl protein (2.5 μg total protein load) were desalted with Pierce high-performance desalting resin or the leading competitor's resin in a Zeba™ Micro Spin Column from Pierce. Sample volume was 10 μl plus a 3 μl buffer stacker placed over the sample. Recovery percentages analyzed by BCA™ Protein Assay (Product # 23225 and 23227).

Protein	Sample Volume	% Recovery
BSA (1 mg/ml)	10 μl	95
	3 μl	91

**Table 2. Effect of sample volume on protein recovery.**

Samples of bovine serum albumin at 1 mg/ml were desalted with a Zeba™ Micro Desalt Spin Column. Recovery percentages were analyzed by BCA™ Protein Assay (Product # 23225 and 23227). Sample volumes were 3 or 10 μl with a 3 μl buffer stacker placed over the sample.

### Ordering Information

Product #	Description	Pkg. Size
89877	Zeba™ Micro Desalt Spin Columns*	25/pack
89878	Zeba™ Micro Desalt Spin Columns*	50/pack
89879	Zeba™ Micro Spin Columns (Empty)	50/pack

\* Recommended for processing compounds >7,000 MW.

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## PIERCE

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