

REVA Detergent Removal Resin

Detergents or surfactants are used extensively in protein chemistry to solubilize and stabilize proteins and to disaggregate protein complexes [1]. However, the presence of excess unbound detergent interferes with many downstream applications like ELISA, enzyme assays, isoelectric focusing and mass spectrometry.

Orochem REVA Detergent Removal Resin specifically binds and removes high concentrations of a wide variety of detergents used in protein research for the preparation of biological samples. The resin is designed for the efficient removal of wide variety of commonly used ionic, nonionic, and zwitterionic detergents from proteins and peptide samples with high sample recovery in a centrifuge format for 25 to 1000 µl samples.

The easy-to-use spin format is fast (less than 15 min) and significantly improves results over the standard drip column and batch methodologies with >95% removal of detergents. The resin is available in bulk resin slurries, 96-well plate format for high-throughput applications as well as in spin column format.

Highlights

Efficient Detergent Removal

Removes >95% of detergents

Easy-to-use

No cumbersome column preparation or equilibration

Fast

No waiting for protein to emerge by gravity-flow

High Protein Recovery

Low non-specific protein binding resin maximizes protein recovery



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Detergent Removal Efficiency and Protein Recovery

(Samples, 0.1mL) containing 100 µg of BSA and detergent were processed through 0.5mL of Orochem REVA Detergent Removal Resin as described above. Residual SDS was measured using Stains-All¹; Triton X-100 and NP-40 were measured by absorbance at 275nm (protein absorbance was subtracted); and sodium deoxycholate, CHAPS and octyl glucoside were measured by using concentrated sulfuric acid and phenol². Protein concentration was determined with the BCA Protein Assay.

Detergent Concentration (%)	Detergent Removal (%)
2	99
1	95
5	98
5	99
5	99
3	96

Ordering Information: Please enquire for price.

Catalog No.	Description	Package Size
OCPDRS005	REVA Detergent Removal Spin Columns, 0.5mL Formulation: Polypropylene columns with proprietary resin Sufficient For 25 to 100µL sample with each column	25
OCPDRS02	REVA Detergent Removal Spin Columns, 2mL Formulation: Polypropylene columns with proprietary resin Sufficient For 150 to 500µL sample with each column	5
OCPDRS04	REVA Detergent Removal Spin Columns, 5mL Formulation: Polypropylene columns with proprietary resin Sufficient For 500 to 2000µL sample with each column	5
OCPDRSP96	REVA Detergent Removal Spin Plates Formulation: Polypropylene high-profile 96-well filter plates containing 550µL resin; Polypropylene wash and collection plates Sufficient For: 2 x 96 samples, each 20 to 100µL	2

Reference: Neugebauer, J. (1990). Methods Enzymol. 182, 239-282.