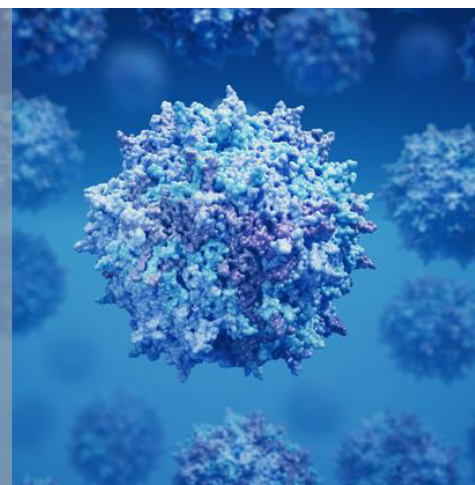


Fast and Simple Sample Preparation for Biomolecules

AdvanceBio Spin columns



Improve your data and protect your instrumentation with analytical- and semipreparative-scale spin columns and 96-sample plates for desalting or buffer exchange of biomolecules.

Elevate your protein and oligonucleotide workflows with a quick and easy sample preparation step to both improve the quality of your data and protect your LC columns and MS instrumentation. Agilent AdvanceBio Spin columns are designed for use with a centrifuge, and samples are ready for analysis in just 10 to 15 minutes.

Experience application flexibility with three different formats

AdvanceBio Spin columns are gel-filtration-based products available in three different formats for application flexibility: analytical- and semipreparative-scale columns for single samples, and 96-sample plates for high-throughput settings. The column bed contains the same cross-linked dextran particles in all three formats, so users can easily scale up or down in sample number or volume. Choose from:

- **Analytical-scale spin columns:** for individual samples of up to 100 μ L; perfect for LC/MS samples
- **Larger, semipreparative-scale spin columns:** for individual samples of up to 1 mL; useful for protein or oligonucleotide samples
- **Analytical-scale 96-sample plates:** for multiple samples of up to 50 μ L; used for high-throughput settings

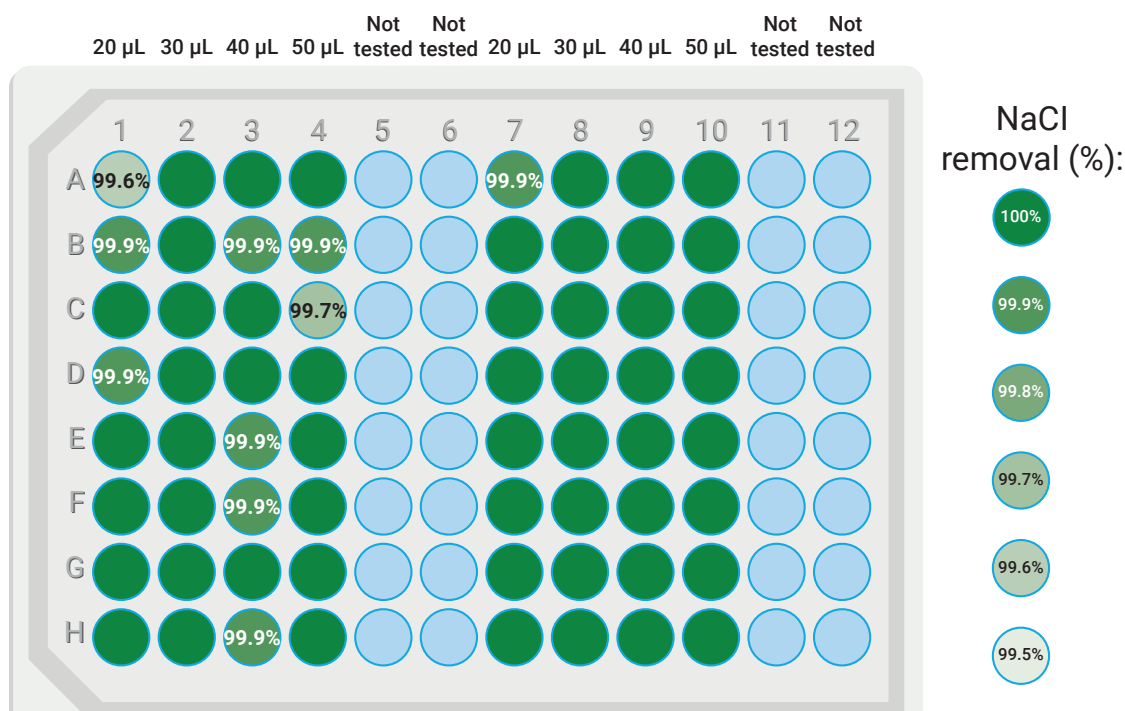


Figure 1. Agilent AdvanceBio Spin columns and 96-sample plates are highly effective at removing salt. Salt removal is consistently high across the 96-sample plate at a variety of sample volumes.

Better prepare your sample matrix and buffer

When monitoring critical quality attributes, the sample matrix and buffer should be optimal for your analysis. With AdvanceBio Spin columns, you can quickly and effectively remove excess salts or small molecules from your sample matrix, or exchange the sample matrix from one buffer to another, offering the following benefits:

- **Protected instrumentation:** For MS analysis, too much salt or a nonvolatile buffer can both reduce sensitivity, leading to poor mass accuracy, and make the instrument dirty, forcing downtime to clean it. Use AdvanceBio Spin columns to lower the salt concentration (Figure 1) or exchange a nonvolatile buffer for a volatile, MS-friendly buffer (Figure 2).
- **Better peak shape and reduced clogs:** When your protein or oligo matrix is incompatible with chromatography, this can lead to precipitation, which causes clogs and poor peak shape, leading to poor resolution. AdvanceBio Spin columns keep your sample matrix compatible with your starting conditions to get better peak shape and reduced clogs.
- **Eliminated reaction by-products and excess reagents from oligo synthesis:** Certain assays for smaller oligos like microarrays, sequencing, or qPCR primers only require a quick cleanup. With AdvanceBio Spin columns, you can quickly remove small-molecule by-products from the synthesis, cleavage, and deprotection steps.
- **Improved sensitivity through reduced matrix interferences:** Buffers can interfere with labeling reactions. For example, primary amine buffers like histidine can become labeled by Agilent InstantPC, instead of your released N-glycans (Figure 3). Use AdvanceBio Spin columns for buffer exchange to ensure you're getting the best possible sensitivity.

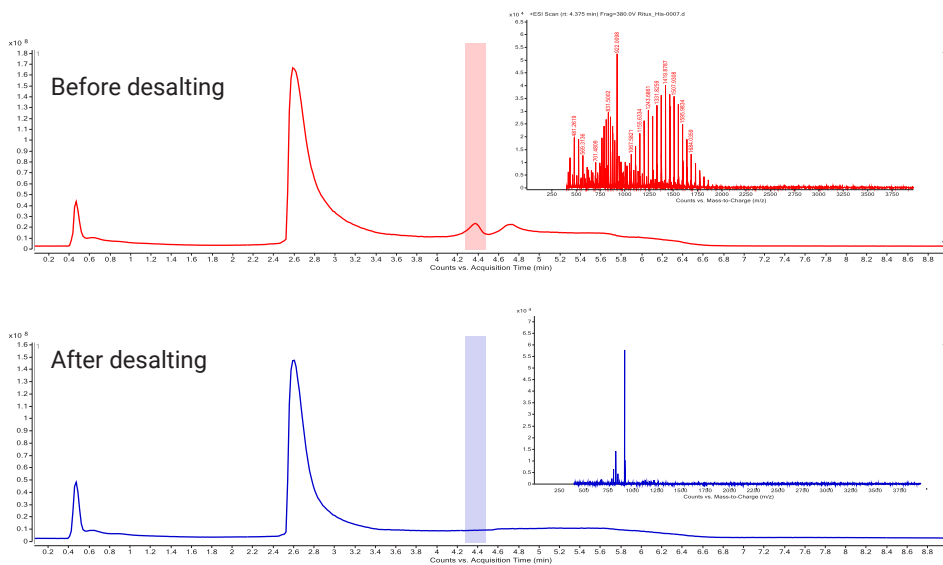


Figure 2. Reversed-phase LC/MS analysis of rituximab formulated in histidine buffer, containing sodium citrate and polysorbate 80 with and without desalting using an Agilent AdvanceBio Spin column. The insert mass spectra show how much contaminating detergents are removed from the sample, prolonging the life of the LC column and maximizing uptime of the instrument by keeping it cleaner.

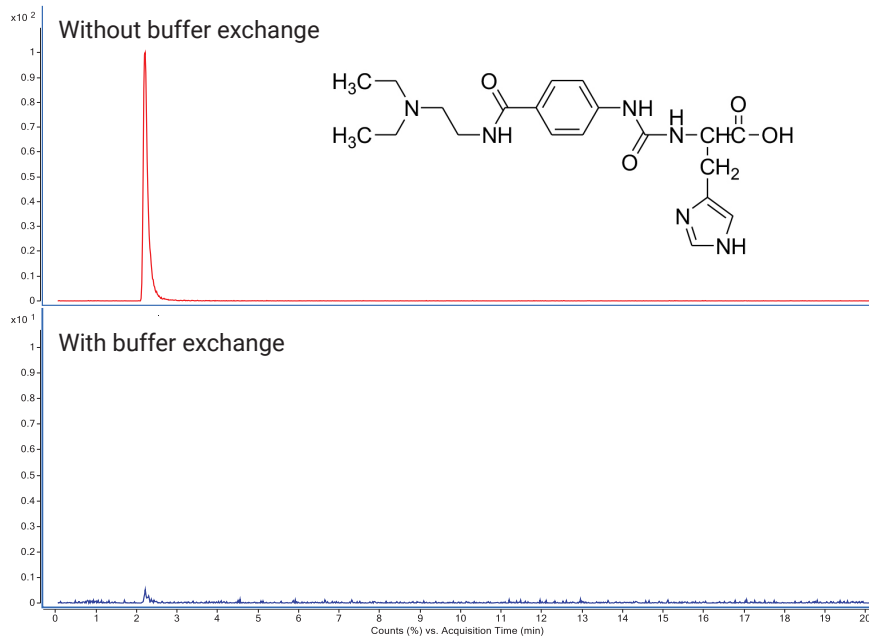


Figure 3. Agilent InstantPC-labeled histidine, detected in rituximab samples without buffer exchange (top) and with buffer exchange (bottom). The histidine buffer is much more abundant than the released glycans in the sample and competes with the glycans to react with the InstantPC label.

Ordering information

Description	Part Number
AdvanceBio Spin columns for desalting or buffer exchange, < 100 μ L samples, 25/pk, collection tubes included	1980-1103
AdvanceBio Spin 96-sample plate for desalting or buffer exchange, 10–50 μ L samples, 1/pk	1980-1104
AdvanceBio Spin columns for desalting or buffer exchange, < 1000 μ L samples, 50/pk columns + four reusable adapters	1980-1105
AdvanceBio Spin column reusable adapters, 8/pk For optional use with p/n 1980-1105	1980-1106
96-well plate, 1.2 mL, round wells, U shape, polypropylene, 27 mm, 25/pk Recommended for wash steps with p/n 1980-1104	5043-9308
96-well plate, 0.33 mL, round wells, V shape, polypropylene, 14 mm, 25/pk Recommended for final collection step with p/n 1980-1104	5043-9312
Sealing mat, 96 wells, silicone, 50/pk	5042-1389
Centrifuge tube, polypropylene, graduated, 29 mm od, 115 mm, conical base, wide neck, threaded top, 50 mL, 25/pk	5610-2049
Centrifuge tube, polypropylene, graduated, 29 mm od, 115 mm, skirted conical base, wide neck, threaded top, 50 mL, 500/pk	190065200

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DE27744541

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© Agilent Technologies, Inc. 2024
Published in the USA, April 2, 2024
5994-7305EN