Which vial type should I use for a low volume sample study of proteins - FAQ

Choosing the Right Vial for Low-Volume Protein Studies

When working with low-volume protein samples, vial selection plays a critical role in preserving sample integrity and ensuring accurate results. Proteins can adsorb to borosilicate glass surfaces in two primary ways:

- Through hydroxyl groups or silanols present on untreated glass surfaces
- Via hydrophobic interactions with the glass itself

These interactions can lead to sample loss, inconsistent concentrations, and compromised data quality.

Recommended Solution: RSA-Pro X™ Vials

Deactivated RSA-Pro X™ vials are specifically designed to address these challenges. They offer:

- Advanced surface treatment that is more complete than any other glass vial available
- Non-stick, hydrophobic surface that resists protein binding
- Hydrolytic stability, even under thermal stress from heating and cooling cycles

This makes RSA-Pro X™ vials the optimal choice for sensitive, low-volume protein applications where sample recovery and consistency are essential.

RSA-Pro X™
HYDROLYTIC STABILITY

RSA -Pro X vial product page and demonstration video

Alternately, if you can use plastic vials, your best option is most likely using the 300ul *LCMS Poly Vials* or our *700ul LCMS Poly Vials.*

Printed from the Chrom Resource Center
Copyright 2025, All Rights Apply
MicroSolv Technology Corporation
9158 Industrial Blvd. NE, Leland, NC 28451
Tel: (732) 380-8900
Fax: (910) 769-9435
Email: customers@mtc-usa.com
Website: www.mtc-usa.com