

The following suggested protocols have been optimized using 100 μL of a maximum and minimum protein concentrations of 2 mg/mL and 0.01 mg/mL respectively and are provided to demonstrate the potential use of the ProTrap XG .

More dilute protein solutions require extra care, please contact us (info@proteiform.com) for a special protocol.

Protein Precipitation in Acetone Protocol

Reagents required in this protocol:

sodium chloride, acetone

- Screw a Plug onto the base of the Filtration Cartridge.
- If your sample contains no sodium chloride, add NaCl to give a final concentration of 20 to 100 mM.
- Transfer 100 μL of the salted protein to the plugged Filtration Cartridge.
- Add 400 μL room temperature acetone.
- Cap the Filtration Cartridge and rock gently to combine the solvents.
- Insert the Filtration Cartridge in the Microcentrifuge Tube, allow 30 minutes for the protein to fully aggregate at room temperature.
- With Plug attached, centrifuge at 2500 $\times g$ (5000 rpm) $\times 2$ minutes.
- Remove Filtration Cartridge from the Microcentrifuge Tube, invert, and unscrew the Plug.
- Return the capped Filtration Cartridge to the Microcentrifuge Tube and centrifuge at 350 $\times g$ (2000 rpm) $\times 5$ minutes. Discard the flow through solvent.
- Wash the protein pellet with 400 μL acetone. Immediately centrifuge at 350 $\times g$ (2000 rpm) $\times 2$ minutes. Discard the flow through wash solvent.

Proceed immediately to the **Protein Digestion Protocol**.

Resolubilization of Intact Protein Protocol

This procedure applies to samples following solvent precipitation

Reagents required in this protocol: 80% formic acid

- With Plug attached, add 150 μL of cold (-20°C) 80% formic acid in water.
- Cap the Filtration Cartridge, place in freezer for 10 minutes, then vortex or sonicate for 1 minute.
- Add 350 μL water; cap and vortex to mix the solvent.
- Intact proteins may be directly recovered in a clean Microcentrifuge Tube, centrifuging at 350 $\times g$ (2000 rpm) $\times 5$ minutes.
- Resolubilized proteins may also be subject to OPTIONAL SPE Protocol with the SPE Cartridge accessory (available in some trial packs).

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