

Product Information TCA Precipitating Protein Kit

Product information for BSP011

Introduction:

This kit is designed for precipitating and concentrating protein samples, even nanogram quantities, by TCA precipitation. The procedure is simple and rapid; it can be used to produce solubilized protein in diluents of your choice for SDS-PAGE electrophoresis or western blot. The kit contains (1) Trichloroacetic Acid 100% (6.1 N) and Deoxycholate Solution, (2) Wash Solution, (3) Dissolution buffer, and (4) Neutralization buffer. The kit is sufficient for 50 x 0.2ml samples and should be stored at 4°C.

Composition:

Precipitation Reagent A	2.5ml
Wash Solution Buffer B	30ml
Dissolution Buffer C	1ml
Neutralization Buffer D	0.25ml

Storage:

Store and transport at room temperature. After receiving, store all reagents at 2-8°C. Always ensure that all caps are securely fasted to prevent volatilization.

Procedures:

- 1. Transfer 200ul protein sample into a new 1.5ml centrifuge tube.
- 2. Add 50ul Precipitation reagent A and vortex for 10 seconds.
- 3. Keep the mixture on ice or at 4°C for about one hour.
- 4. Centrifuge at 15000RPM for 15 minutes at 4°C.
- 5. Carefully discard the supernatant and any residual liquid on inner surface of centrifuge tube. Keep the remaining pellet.
- 6. Add 600ul *cold* Wash solution (buffer B) and vortex for 10 seconds.
- Keep the sample on ice or at 4°C for about 15 minutes, then centrifuge at 12000RPM for 15 minutes at 4°C.
- 8. Carefully discard the supernatant and dry the pellets in fume hood or a SpeedVac.
- 9. Dissolve the pellets in 20ul Dissolution solution (buffer C) and vortex for 10 seconds. If the solution appears yellow, add 1-5ul Neutralization solution (buffer D) and vortex until the solution become blue.
- 10. Boil the sample for 5 minutes, and keep for SDS-PAGE electrophoresis.

Notes:

- 1. After step 5, it may be helpful to invert the centrifuge tube on filter paper to completely drain off residual liquid.
- 2. Always position microfuge tubes in the centrifuge with the same orientation, i.e. cap-hinge



facing out-ward. This will allow the pellet to remain on the same side of the tube during repeated centrifugations and minimize the loss of protein. Additionally, always ensure the tip does not directly touch the mass of protein pellet when discarding the supernatant.

3. This kit can only be used for in vitro experiments.