

Product information

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Universal Protein Precipitation Reagent

Catalog #: BSP012
Size: 100 Prep
Storage: RT*

*: The kit is shipped at ambient temperature.
Upon receipt, store at room temperature.
Components will have a one year shelf life under these conditions.

Product Description:

Protein solutions as dilute as 1ng/ml can be quantitatively concentrated into a small volume through the Universal Protein Precipitation Reagent. Protein precipitation is not affected by the presence of detergents, chaotropics, sucrose, reducing agents, or other common laboratory agents. The final protein precipitate is re-suspended in a small volume of buffer and the recovery is generally 100%. The Reagent is suitable for concentrating proteins for downstream applications such as gel electrophoresis and protein purification. The reagent is not suitable for proteins whose activity must be maintained for further research. The Reagent can perform 100 preparations and concentrate 10ml total of protein sample solution.

Contents:

Description	Size
Precipitation Reagent I	30ml
Precipitation Reagent II	30ml

Procedure:

1. Mix 1 volume of protein solution with 3 volumes of Precipitation Reagent I. Vortex the mixture and incubate at 4°C for 10-15 minutes.
2. Add 3 volumes of Precipitation Reagent II into the mixture above. Vortex and incubate at 4°C for 10-15 minutes.
Example: For 0.1ml protein solution, add 0.3ml Precipitation Reagent I and incubate, then add 0.3ml of Precipitation Reagent II.
3. Centrifuge the tube at 15,000xg for 5 minutes at 4°C to form a tight pellet.
4. As soon as the centrifuge stops, remove the tube from the centrifuge. Note: Pellets are typically not able to diffuse after centrifugation, but the pellet mass may not be visible if very small quantities of protein are used.
5. Carefully remove the supernatant using a pipette tip to avoid disturbing the pellet, then invert the tube on filter paper and let residual liquid completely drain off. Note: An optional wash step can be carried out at this point. If desired, wash the pellet with 6 volumes of an ethanol and ethylether mixture (1:1 v/v) and repeat steps 3-5. This optional wash helps further reduce Precipitation Reagents I and II residue.
6. Re-suspend the protein pellet in an appropriate volume of buffer of your choice as per your experiment conditions.

Additional Notes:

1. Perform the entire procedure at 4°C. For small volumes, use microfuge tubes. Always position microfuge tubes in the centrifuge at the same orientation, i.e. cap-hinge facing outward. This allows the pellet to remain to the same side of the tube during repeated centrifugations and minimizes the loss of protein from the pellet.
2. Samples containing >100µg protein produce large and tightly packed protein pellets, which require a longer time to dissolve in Buffers. Grinding of the protein pellet with a pestle will accelerate solubilization of the pellet. We recommend use of microfuge tubes and a tight fitting pestle for grinding samples containing larger than 100µg protein.
3. For protein pellets that are dissolved in laemmli buffer or other similar loading buffer, please adjust the pH of sample and loading buffer mixture by addition of NaOH after resuspension. You should see the yellow of the solution become blue.
4. The reagent is intended for research use only. All due care and attention should be exercised in the handling of the products. Always wear a suitable lab coat, disposable gloves, and protective goggles.



PRODUCTS ARE INTENDED FOR BASIC SCIENTIFIC RESEARCH ONLY.
NOT INTENDED FOR HUMAN OR ANIMAL USE.