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Product information

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Tissue Protein Lysis Buffer

Catalog #: BSP006-20 / BSP006-5X20
Size: 20ml / 5x20ml
Storage: Mixed components storage*

*: Product will be shipped with ice pack. Check storage conditions. Products have one year expiration from time of purchase.

Product Description:

Tissue Lysis Buffer has been developed for extraction of total soluble protein from animal tissues. The buffer is based on an organic buffer, which utilizes a mild non-ionic detergent, and a proprietary combination of various salts and agents to enhance extraction and stability of proteins. Depending on the particular application, additional components, such as protease inhibitors, salts, reducing agents or chelating agents may be added to the reagent before proceeding with tissue lysis. The simple composition of this reagent provides versatility and prepared cell lysate may be used for reporter assays (e.g. luciferase, β-galactosidase, chloramphenical acetyltransferase), protein kinase assays (e.g. PKA, PKC, tyrosine kinase), immunoassays (e.g. Western blots, ELISAs, RIAs) and protein purifications. Tissue active protein extraction buffer is mild, contains minimal amount of detergent for cell lysis, and the detergent is dialyzable.

Features:

- Simple - just homogenize tissue sample in 1:20 (w/v) of tissue to tissue active protein extraction buffer, then centrifuge to pellet cell/tissue debris
- Mild detergent - easy and quick removable by dialysis
- Can be used with additional components (e.g. protease inhibitors, salts, reducing agents, chelating agents, etc.)
- Lysate may be used for reporter assays, protein kinase assays, immunoassays and/or protein purifications
- Lysate is compatible with standard protein assays such as the Better Bradford Protein Assay (SK3041).

Composition:

Component	BSP006-20	BSP006-5X20
Lysis Buffer	20 ml	5 x 20 ml
Protease Inhibitor	25 µl	5 x 25 µl
DTT	25 µl	5 x 25 µl
PMSF	250 µl	5 x 250µl

Storage and Transportation:

Upon receipt, store the Lysis Buffer at room temperature and Protease Inhibitor, DTT, PMSF at -20°C.

Procedures:

1. Weigh the tissue sample. For each gram of tissue used for extraction of protein, use approximately 15-20 ml Tissue Lysis Buffer (before use, add 1 µl Protease inhibitor, 1 µl DTT, 10 µl PMSF into 1 ml Lysis Buffer). If more concentrated protein extract is required, the volume of the Tissue Lysis Buffer may be reduced by 20-30%.
2. Homogenize the tissue in the presence of the Tissue Lysis Buffer. Ensure the homogenization is performed with an efficient instrument (e.g. pestle-tube homogenizers, electrical blender or grinders, etc.). Homogenization should be performed at 4°C. Care must be taken to prevent the rise of temperature. As a safe practice, homogenize the tissue with brief bursts of actions (10-15 seconds) and keep the homogenate in ice-cold bucket.

3. Centrifuge the homogenate to pellet the tissue debris, at 20,000 x g for 30 minutes at 40°C.

4. Collect the clear supernatant for further processing or analysis.

Notes:

1. Depending on specific applications, EDTA may be added. Prepare an appropriate volume of the Tissue Lysis Buffer for use by adding EDTA to a final concentration of 5 mM.

2. If the inhibition of phosphatase activity is required, add a cocktail of phosphatase inhibitors (PL017) to prevent phosphatase activities during extraction procedures.

3. All of reagents and instruments must be pre-cold, thus the extracted protein can remain activity and intact.