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A Geno Technology, Inc. (USA) brand name

Tissue PE LB[™]

Tissue Protein Extraction Lysis Buffer

(Cat. # 786-181, 786-181T)



INTRODUCTION

Tissue-PE LB[™] has been developed for extraction of total soluble protein from animal tissues. Tissue- PE LB[™] 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 application, additional agents such as chelating agents, reducing agents and protease inhibitors may be added into Tissue-PE LB[™]. Tissue- PE LB[™] reagent has been tested for use with a wide variety of animal tissues, fresh as well as frozen tissues.

The protein extract prepared with Tissue-PE LB[™] may be used for most enzyme assays including reporter gene assays (e.g. β-galactosidase, luciferace, chloramphenical acetytransferease), kinases (e.g. PKC, PKA, Tyrosin Kinase), and immunoassays (e.g., ELISA, Western blots, RIA).

COMPATIBILITY

Tissue-PE LB^{\sim} is compatible with most downstream applications including various enzyme assays, running various chromatography, and gel electrophoresis applications. Tissue-PE LB^{\sim} is also compatible for protein estimation with NI $^{\sim}$ (Non-Interfering) Protein Assay (Cat. # 786-005).

ITEM(S) SUPPLIED

Description	Cat. # 786-181	Cat. # 786-181T
Tissue-PE LB [™]	500ml	50ml

STORAGE CONDITIONS

It is shipped at ambient temperature. Store at 4° C, upon arrival and is stable for 1 year, when stored as recommended.

ADDITIONAL ITEMS NEEDED

Centrifuge, test tube, incubator, DTT & EDTA

PREPARATION BEFORE USE

Depending on applications, DTT and EDTA may be added. Prepare an appropriate volume of the Tissue-PE LB^{T} for use by adding DTT and EDTA both to a final concentration of 5mM. If the presence of a divalent metal ion is necessary for any application, do not add EDTA; instead add an appropriate divalent salt to a final concentration of 5mM.

Protease Inhibition

If, the inhibition of protease activity is required, add a cocktail of protease inhibitors to prevent protease activities during extraction procedure.

Any additional agent needed may also be added in the Tissue-PE LB[™].

PROTOCOL

- Weigh the tissue sample. For each gram of tissue used for extraction of proteins, use approximately 15-20ml Tissue-PE LB[™]. If there is need for preparing more concentrated protein extract, the volume of the Tissue-PE LB[™] added may be reduced by 20-30%.
- 2. Homogenize the tissue in the presence of the Tissue-PE LB[™]. Make sure that the homogenization is performed with an efficient instrument (e.g., pestle-tube homogenizers, electrical blender or grinders, etc.). Homogenization should be performed at 4⁰C and during homogenization 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 between homogenization hold the homogenate in ice-cold bucket for 1-2 minutes.
- 3. Centrifuge the homogenate to pellet the tissue debris, at 20,000 x g for 30 minutes at 4° C.
- 4. Collect the clear supernatant for further processing or analysis.
- The debris may contain many nuclear and membrane bound proteins. Debris may be further extracted by adding appropriate detergents in the Tissue-PE LB[™].

RELATED PRODUCTS

Download our Protein Electrophoresis and Western Blotting Handbooks.



http://info.gbiosciences.com/complete-protein-sample-preparation-handbook For other related products, visit our website at <u>www.GBiosciences.com</u> or contact us.

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