

Human Lung Normal Tissue Lysate

Catalog No. PX331 Quantity: 100 µg

Description: Human tissue lysates are ideal for biomarker identification and screening, as well as

protein-protein interactions, and protein expression.

Human tissue samples are flash frozen within 5 to 10 minutes of removal and stored in liquid N_2 until processed into lysates. Freezing tissues quickly following removal is significant. It has been shown that tissue ischemia causes the differential expression of 10 to 15% of all genes within 15 minutes of tissue resection. 30% of all proteins undergo significant changes in abundance within 30 minutes. Tissue ischemia time affects gene and protein expression patterns within minutes following surgical excision.

Frozen tissue is homogenized by mechanical and liquid shearing in a modified RIPA buffer, clarified by centrifugation, to pellet insoluble proteins, extra-cellular matrix, any intact nuclei, lysosomes and mitochondria. The supernatant is designated as the *soluble protein tissue lysate*, containing soluble proteins (cytosolic, nuclear and membrane) proteins, ER membranes and ribosomes. Tissue lysate may appear turbid at cold temperatures, due to crystallization of buffer components. The solution will clear upon warming to room temperature.

Diagnosis: Normal tissue

(Matched sets are available for histologically-characterized Human Tumor lysate and

adjacent Normal Tissue lysate.)

Donor ID: Specified

Tissue: Lung

Concentration: 1.0 mg/ml, with 10% overfill

Formulation: Modified RIPA buffer [PBS (pH 7.4), 0.25% Na deoxycholate, 0.1% SDS, 1 mM EDTA, 1

mM NaF, 1 mM Na3VO4, 1 mM PMSF,1 μg/ml Aprotinin, 1 μg/ml Leupeptin, 1 μg/ml

Pepstatin A

Applications: Tissue lysate has not been subjected to heat denaturation or reducing conditions.

This allows the lysate to be used in a variety of applications directly, such as protein-protein interaction, ligand binding, ELISA, IP, 1D, 2D gel electrophoresis and WB. For 1D, 2D gel electrophoresis, the addition of a denaturing gel loading

buffer with reducing agents may be required.

Storage & Stability: Centrifuge vial briefly to maximized recovery. Store single use aliquots at -80°C for up to

1 year. Avoid repeated freeze/thaw cycles.

Certification: This material has been tested as negative for HbsAg, HIV 1/2 and HCV.

Use Universal Precautions when handling. Treat as a potentially infectious agent and

E-mail: info@cellsciences.com

Website: <u>www.cellsciences.com</u>

dispose of appropriately.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

Toll Free: 888-769-1246

Phone: 978-572-1070

Fax: 978-992-0298