

## Human Kidney Tissue Lysate, Normal

**Catalog No.** PX354 **Quantity:** 100 µg

**Description:** Human tissue lysates are used 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<sub>2</sub> 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 tumor excision.

Frozen Kidney 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:** **Matched sets are available for histologically-characterized Human Tumor lysate and adjacent Normal Tissue lysate.**

**Sex/Age:** Specified

**Tissue:** Kidney

**Concentration:** 1.0 mg/ml

**Formulation:** Modified RIPA buffer [PBS (pH 7.4), 0.25% Na deoxycholate, 0.1% SDS, 1 mM EDTA, 1 mM NaF, 1 mM Na<sub>3</sub>VO<sub>4</sub>, 1 mM PMSF, 1 µg/ml Aprotinin, 1 µg/ml Leupeptin, 1 µg/ml Pepstatin A

**Applications:** Tissue lysate has not been subjected to denaturing 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 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 for HbsAg, HIV 1/2 and HCV. Use Universal Precautions when handling. Treat as a potentially infectious agent and dispose of appropriately.

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