

# PRODUCT INFORMATION

## Mammalian Total Protein Extraction Kit

Cat. no. 39241

### Product Description:

**General** Mammalian Total Protein Extraction Kit provides a fast and efficient method to extract total proteins (cytoplasmic, membrane and nuclear proteins) from mammalian cells and tissue without ultracentrifugation. The extracted proteins are suitable for SDS PAGE, Western blot, ELISA, and other functional assays.

**Storage** Recommended temperature for long-term storage: - 15 °C to - 25 °C

**Components**  
 100 ml Total Protein Extraction Buffer (TPEB)  
 1 vial Protease Inhibitor Mix M  
 1 ml DMSO

- Prior to use, add PMSF (0.1 – 1 µM) into TPEB.
- Aliquot TPEB after first use.
- Reconstitute 1 vial Protease Inhibitor Mix M with 1 ml DMSO to get a 100x solution.
- All steps should be carried out on ice or + 4 °C.

### Protocol – Cultured cells

- Harvest  $0.5 - 2 \times 10^7$  cells, pellet them by centrifugation (500xg, 5 min), wash the pellet with 1 ml pre-chilled PBS (centrifugation 500xg, 5 min). Repeat the wash once.
- Add 1 ml TPEB to the cell pellet, vortex and incubate on ice for 30 min with vortexing every 10 min.
- Centrifugation: 14,000xg, 10 min
- Gently collect and transfer the supernatant to a new 1.5 ml-tube for immediate use or store at - 80 °C.

### Protocol – Tissue

- Cut 20 - 100 mg tissue into small pieces, wash minced tissues 1 ml pre-chilled PBS and centrifuge 5 min at 500xg, gently discard the supernatant and repeat the wash step once.
- Add 1 ml TPEB and mix thoroughly by vortexing. Transfer the suspension to a pre-chilled glass homogenizer and homogenize the tissue by 6 – 10 strokes.
- Gently transfer the suspension to a new 1.5 ml-tube and incubate on ice for 30 min with vortexing every 10 min.
- Centrifugation: 14,000xg, 10 min
- Gently collect and transfer the supernatant to a new 1.5 ml-tube for immediate use or store at - 80 °C.

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