

PRODUCT INFORMATION

Mammalian Membrane Protein Extraction Kit

Cat. No. 39242

Product Description:

General Mammalian Membrane Protein Extraction Kit provides a simple and efficient method to extract membrane proteins from mammalian cells and tissue. The extracted proteins are suitable for SDS PAGE, Western blot, ELISA, and enzyme-activity assays.

Storage Recommended temperature for long-term storage

Buffers: + 2 °C to + 8 °C

Protease Inhibitor Mix M: - 15 °C to - 25 °C

Components 50 ml Membrane Protein Extraction Buffer I (MPEB I)

7.5 ml Membrane Protein Extraction Buffer II (MPEB II)

15 ml Membrane Protein Extraction Buffer III (MPEB III)

1 vial Protease Inhibitor Mix M

1 ml DMSO

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

Protocol – Cultured cells

- (1) Harvest 0.5 - 2x10⁷ cells, wash the cells with 1 ml pre-chilled PBS (centrifugation 1,000xg, 3 min) and discard the supernatant. Repeat the wash once.
- (2) Add 750 µl MPEB I to the cell pellet and vortex for 15 s. Incubate on ice for 10 min and vortex every 2 min.
- (3) Centrifuge at 16,000xg, + 4 °C, 15 min
- (4) Gently transfer the supernatant (cytoplasmic proteins) to a new 1.5 ml-tube for immediate use or store at - 80 °C.
- (5) Add 150 µl MPEB II to the pellet and resuspend it by vortexing 15 s. Incubate on ice for 30 min and vortex every 5 min.
- (6) Add 300 µl of MPEB III to the pellet and vortex 5 s.
- (7) Centrifuge at 16,000xg, + 4 °C, 15 min
- (8) Gently transfer the supernatant (membrane proteins) to a new 1.5 ml-tube for immediate use or store at - 80 °C.

Protocol – Tissue

- (1) Wash 20 - 60 mg tissue with 2 ml pre-chilled PBS, vortex briefly, gently discard the supernatant.
- (2) Add 1 ml PBS, cut the tissue into small pieces and centrifuge 3 min at 500xg, gently discard the supernatant.
- (3) Add 1 ml MPEB I and mix thoroughly by vortexing. Transfer the suspension to a pre-chilled glass homogenizer and homogenize the tissue by 6 – 10 strokes.
- (4) Incubate on ice for 10 min and vortex every 2 min.
- (5) Follow steps (3) – (8) as described in protocol for cultured cells.

Ver 12/17