

**PURExtract™ Cell Protein Extraction Reagent**

Whole intact proteins from any types of mammalian cells

**Cat. No. PCP500**Sufficient reagent to extract protein from 5 x 10<sup>6</sup> of cells**PURExtract™ Cell Protein Extraction Reagent: 500 ml**1 ml of extraction reagent is sufficient to extract protein from 1 x 10<sup>6</sup> of cells.**Description**

PURExtract™ Cell Protein Extraction Reagent is especially designed for extracting whole intact proteins from any types of mammalian cells. Without scraping, freeze-thaw cycles or sonication, intact proteins can be easily extracted in only two steps minimizing protein loss. The yield is higher than the one from RIPA Buffer, freeze-thaw cycles or sonication.

PURExtract™ Cell Protein Extraction Reagent is a ready-to-use, nondenaturing detergent. The extracted total protein is in nondenatured state and can be directly used in many downstream applications, including DNA-protein interaction, SDS-PAGE, gel mobility shift, immunoassays (Western blot, ELISA, RIA), protein assays (PKA, PKC, tyrosine kinase), reporter assays (luciferase,  $\beta$ -galactosidase, chloramphenicol acetyltransferase) or other affinity purification procedures. Furthermore, it is compatible with Coomassie Blue and silver staining.

PURExtract™ Cell Protein Extraction Reagent does not contain protease or phosphatase inhibitors. If desired, please add protease inhibitors, such as PURExtract™ Protease Inhibitor Cocktail (Product No. PRIC02) and PURExtract™ Phosphatase Inhibitor Cocktail (Product No. PHIC02) to the reagent to prevent proteolysis and maintain phosphorylation status of proteins.

**Features**

Ready-to-use, amine-free, dialyzable and nondenaturing detergent.

Without scraping, freeze-thaw cycles or sonication.

Intact proteins can be easily extracted in only two steps minimizing protein loss.

The yield is higher than the one from RIPA Buffer, freeze-thaw cycles or sonication.

Extracted protein is ready for direct use in many downstream applications.

Compatible with standard protein assays such as Bradford and BCA Protein Assay.

**Applications**

The extracted total protein is in nondenatured state and can be directly used in many downstream applications, including DNA-protein interaction, SDS-PAGE, gel mobility shift, immunoassays (Western blot, ELISA, RIA), protein assays (PKA, PKC, tyrosine kinase), reporter assays (luciferase,  $\beta$ -galactosidase, chloramphenicol acetyltransferase) or other affinity purification procedures.

**Storage Conditions**

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**Additional materials required:**

PURExtract™ Protease Inhibitor Cocktail (cat. no. PRIC02).

PURExtract™ Phosphatase Inhibitor Cocktail (cat. no. PHIC02).

4°C centrifuge, centrifuge tubes, micropipettes and tips, PBS.

**Things to do / to know before starting:**

- (1) PURExtract™ Cell Protein Extraction Reagent doesn't contain protease inhibitors and/or phosphatase inhibitor. If desired, add protease inhibitors and/or phosphatase inhibitor to the PURExtract™ Cell Protein Extraction Reagent just before use.
- (2) 1 ml of PURExtract™ Cell Protein Extraction Reagent is sufficient to extract protein from 1 x 10<sup>6</sup> of cells.
- (3) Keep all samples on ice during operation. Centrifuge temperature is 4°C for following procedures.

**Procedure for Monolayer-cultured Mammalian Cells:**

- (1) Carefully remove (decant) culture medium from adherent cells.
- (2) Wash cells once in wash buffer (e.g., PBS) and then discard the wash buffer (e.g., PBS).
- (3) Add the appropriate amount of PURExtract™ Cell Protein Extraction Reagent to the plate or to each plate well. Shake gently for 10 minutes.
- (4) Collect the lysate and transfer the lysate to a microcentrifuge tube. Centrifuge samples at 10,000 x g for 5 minutes to pellet the cell debris.
- (5) Transfer the supernatant to a new tube for further analysis.

**Procedure for Suspension-cultured Mammalian Cells:**

- (1) Collect the cells into an appropriate centrifuge tube. Centrifuge for 5 minutes at 450 x g. Decant and discard the supernatant.
- (2) Wash cells once in wash buffer (e.g., PBS) and centrifuge for at 450 x g for 5 minutes. Decant and discard supernatant.
- (3) Resuspend the cell pellet with appropriate amount of PURExtract™ Cell Protein Extraction Reagent.
- (4) Keep on ice for 10 minutes, and vortex at 2 minutes intervals.
- (5) Centrifuge the samples at 10,000 x g for 5 minutes to pellet the cell debris.
- (6) Transfer the supernatant to a new tube for further analysis.

Note: Lysate preservation requires low temperatures. For long term storage, it is recommended to store the lysate at -70°C.

**Related Products:**

PRIC02	PURExtract™ Protease Inhibitor Cocktail (1 ml x 2)
PHIC02	PURExtract™ Phosphatase Inhibitor Cocktail (1 ml x 2)
PTP500	PURExtract™ Tissue Protein Extraction Reagent (500 ml)
PPE300	PURExtract™ Protein Extraction Reagent (30 prep)
PPF050	PURExtract™ Protein Fractionation Kit (50 preps)
PECO06	PURExtract™ Phosphoprotein Enrichment Kit (6 preps)
PER003	PURExtract™ Phosphoprotein Enrichment Kit (3 ml resin)
PCO06	PURExtract™ Phosphoprotein Purification Kit (6 preps)
PPR003	PURExtract™ Phosphoprotein Purification Kit (3 ml resin)
PHM020	PURExtract™ His-tagged Protein Purification Mini Kit (20 preps)
PHP005	PURExtract™ His-tagged Protein Purification Midi Kit (5 preps)

For research use only.

Not intended for any animal or human therapeutic or diagnostic use.

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PHP005	PURExtract™ His-tagged Protein Purification Midi Kit (5 preps)

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