

Recombinant Mouse PRDX2 Protein (Met1-Asn198), His-tagged

Cat. No. PRDX2-870M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse PRDX2 Protein (NP_035693.3) (Met1-Asn198) was produced by Baculovirus-Insect Cells expression system. This protein was expressed with a polyhistidine tag at the N-terminus.
Species	Mouse
Source	Insect Cells
ProteinLength	Met1-Asn198
Description	Peroxiredoxin-2, also known as Natural killer cell-enhancing factor B, NKEF-B, Thiol-specific antioxidant protein, Thioredoxin peroxidase 1, Thioredoxin-dependent peroxide reductase 1, PRDX2 and NKEFB, is a cytoplasm protein which belongs to the ahpC / TSA family. Peroxiredoxin-2 / PRDX2 contains one thioredoxin domain. Peroxiredoxin-2 / PRDX2 is involved in redox regulation of the cell. It reduces peroxides with reducing equivalents provided through the thioredoxin system. Peroxiredoxin-2 / PRDX2 is not able to receive electrons from glutaredoxin. It may play an important role in eliminating peroxides generated during metabolism. Peroxiredoxin-2 / PRDX2 might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H₂O₂. The Peroxiredoxins / Prx are a family of peroxidases that can reduce H₂O₂ using an electron from thioredoxin (Trx) or other substances. The mammalian Peroxiredoxins / Prx family is divided into six groups (PRDX1PRDX2, PRDX3, PRDX4, PRDX5, PRDX6) on the basis of homology of amino acid sequences. They

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

are located in the cytosol and play a role in the cell signaling system. All six mammalian peroxiredoxins are expressed in the lung. Peroxiredoxins / Prx is overexpressed in breast cancer tissues to a great extent suggesting that Peroxiredoxins / Prx has a proliferative effect and may be related to cancer development or progression.

Predicted N Terminal	His
Form	Lyophilized from sterile 50 mM Tris, pH 7.5, 150 mM NaCl, 10% glycerol, 0.5 mM TCEP. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Molecular Mass	The recombinant mouse PRDX2 consists of 217 amino acids and predicts a molecular mass of 24.1 kDa.
Endotoxin	< 1.0 EU per µg protein as determined by the LAL method.
Purity	> 90 % as determined by SDS-PAGE.
Stability	Samples are stable for up to twelve months from date of receipt at -70 centigrade.
Storage	Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4°C before opening to recover the entire contents.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name Prdx2 peroxiredoxin 2 [Mus musculus]

Official Symbol PRDX2

Synonyms PRDX2; Prx II-1; Calpromotin; TR; PRP; TPx; TSA; TDX1; NkefB; PrxII; TPx-B; Tdpx1; Torin; Band-8; AL022839;

Gene ID 21672

mRNA Refseq NM_011563

Protein Refseq NP_035693

UniProt ID Q61171

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA