

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

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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.

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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

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