

## Recombinant Human Peroxiredoxin 2, His-tagged

Cat. No. PRDX2-503H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant human PRDX2 protein with N-terminal His tag was expressed in an Baculovirus infected <i>Sf9 cell</i> expression system, MW=22.7 kDa.
<b>Species</b>	Human
<b>Source</b>	Sf9 Cells
<b>Description</b>	Peroxiredoxin-2 is a protein that in humans is encoded by the PRDX2 gene. This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein may play an antioxidant protective role in cells, and may contribute to the antiviral activity of CD8(+) T-cells. This protein may have a proliferative effect and play a role in cancer development or progression. The crystal structure of this protein has been resolved to 2.7 angstroms. Transcript variants encoding distinct isoforms have been identified for this gene.
<b>Purity</b>	> 95%.
<b>Formulation</b>	25 mM Tris-HCl, pH 8.0, 100 mM NaCl, 0.05% Tween-20, 50% glycerol, and 3 mM DTT.
<b>Specific Activity</b>	149 pmol/min/ug. 3.45 µg of PRDX1 was incubated in 50 mM Hepes (pH 7.0) containing 200 µM NADPH, 3 µM thioredoxin, and 1.5 µM thioredoxin reductase. The reaction mixture was incubated at 30 °C for 5 min, followed by the addition of 0.22 mM H <sub>2</sub> O <sub>2</sub> . NADPH oxidation was monitored (fluorescence decrease) for the next 10

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min.

**Application** Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

**Storage** >6 months at –80°C.

## GENE INFORMATION

**Gene Name** [PRDX2 peroxiredoxin 2 \[ Homo sapiens \]](#)

**Synonyms** peroxiredoxin 2; PRP; TSA; PRX2; NKEFB; PRXII; TDPX1; MGC4104; PRDX2; torin; EC 1.11.1.15; thioredoxin peroxidase 1; thiol-specific antioxidant 1; natural killer-enhancing factor B; thiol-specific antioxidant protein; natural killer cell-enhancing factor B; hioredoxin-dependent peroxide reductase 1; Natural killer cell-enhancing factor B; Thioredoxin peroxidase 1; NKEF-B; Thioredoxin-dependent peroxide reductase 1

**Gene ID** [7001](#)

**mRNA Refseq** [NM\\_005809](#)

**Protein Refseq** [NP\\_005800](#)

**MIM** [600538](#)

**UniProt ID** [P32119](#)

**Chromosome Location** 19p13.2

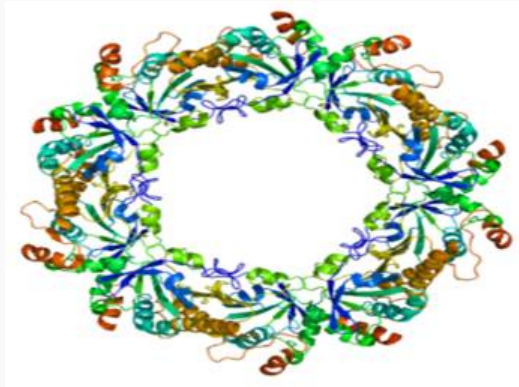
**Function** antioxidant activity; oxidoreductase activity; thioredoxin peroxidase activity

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