Peroxiredoxin 2 Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	Peroxiredoxin 2 (PRDX2), Blocking Peptide
Full Product Name	Peroxiredoxin 2 Blocking Peptide
Product Gene Name	PRDX2 blocking peptide
Product Synonym Names	Epididymis secretory sperm binding protein Li 2a; HEL S 2a; MGC4104; Natural killer cell enhancing factor B; Natural killer cell-enhancing factor B; Natural Killer Enhancing Factor B; NKEF B; NKEF-B; NKEFB; Peroxiredoxin-2; PRDX 2; PRDX2; PRDX2_HUMAN; PrP; PRX2; PRXII; PTX1; TDPX1; Thiol Specific Antioxidant 1; Thiol specific antioxidant protein; Thiol-specific antioxidant protein; Thioredoxin Dependent Peroxide Reductase 1; Thioredoxin peroxidase 1; Thioredoxin-dependent peroxide reductase 1; Torin; TPX1; TSA
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	Peroxiredoxin 2 peptide (MBS9626063) is used for blocking the activity of Peroxiredoxin 2 antibody (MBS9607347)
Molecular Weight	15,819 Da
OMIM	600538
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for PRDX2 blocking peptide	Blocking/Control
Related Product Information for PRDX2 blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of PRDX2 blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PRDX2 purchase	MBS9626063 is a blocking peptide targeting PRDX2. Also known as Peroxiredoxin 2 Blocking Peptide.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PRDX2. It may not necessarily be applicable to this product.

NCBI GI #	32189392
NCBI GeneID	7001
NCBI Accession #	NP_005800.3
UniProt Primary Accession #	P32119

UniProt Secondary Accession #	P31945; P32118; P35701; Q6FHG4; Q92763; Q9UC23; A8K0C0
UniProt Related Accession #	P32119
GenBank Nucleotide #	NM_005809.5
NCBI Official Full Name	peroxiredoxin-2
NCBI Official Synonym Full Names	peroxiredoxin 2
NCBI Official Symbol	PRDX2
NCBI Official Synonym Symbols	PRP; TSA; PRX2; PTX1; TPX1; NKEFB; PRXII; TDPX1; NKEF-B; HEL-S-2a
UniProt Protein Name	Peroxiredoxin-2
UniProt Synonym Protein Names	Natural killer cell-enhancing factor B; NKEF-B; PRP; Thiol-specific antioxidant protein; TSA; Thioredoxin peroxidase 1; Thioredoxin-dependent peroxide reductase 1
Protein Family	Peroxiredoxin
UniProt Gene Name	PRDX2
UniProt Synonym Gene Names	NKEFB; TDPX1; NKEF-B; TSA
UniProt Entry Name	PRDX2_HUMAN
NCBI Protein Information	peroxiredoxin-2; epididymis secretory sperm binding protein Li 2a; natural killer cell-enhancing factor B; thiol-specific antioxidant 1; thioredoxin peroxidase 1; thioredoxin-dependent peroxide reductase 1; torin
NCBI Summary for PRDX2	This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein plays an antioxidant protective role in cells, and it may contribute to the antiviral activity of CD8(+) T-cells. The crystal structure of this protein has been resolved to 2.7 angstroms. This protein prevents hemolytic anemia from oxidative stress by stabilizing hemoglobin, thus making this gene a therapeutic target for patients with hemolytic anemia. This protein may have a proliferative effect and play a role in cancer development or progression. Related pseudogenes have been identified on chromosomes 5, 6, 10 and 13. [provided by RefSeq, Mar 2013]
UniProt Comments for PRDX2	PRDX2: a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. Involved in redox regulation of the cell. Reduces peroxides with reducing equivalents provided through the thioredoxin system but not from glutaredoxin. May play an important role in eliminating peroxides generated during metabolism. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H(2)O(2). May have a proliferative effect and play a role in cancer development or progression. Three splice-variant isoforms have been identified. Protein type: EC 1.11.1.15; Oxidoreductase Chromosomal Location of Human Ortholog: 19p13.2 Cellular Component: cytoplasm; cytosol Molecular Function: antioxidant activity; thioredoxin peroxidase activity Biological Process: regulation of apoptosis; response to reactive oxygen species; removal of superoxide radicals; hydrogen peroxide catabolic process; negative regulation of neuron apoptosis; response to oxidative stress; negative regulation of apoptosis
Research Articles on PRDX2	**1.** the reduced expression of iNOS or peroxiredoxin 2 may play an important role in the carcinogenesis of gastric cancer
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