

Catalog # ABV11152

Peroxiredoxin II Antibody (1E8) Mouse Monoclonal Antibody

Specification

Peroxiredoxin II Antibody (1E8) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW

WB, IHC, E <u>P32119</u> Human, Mouse, Rat Mouse Monoclonal Mouse IgG 1 21892

Peroxiredoxin II Antibody (1E8) - Additional Information

Gene ID 7001

Positive Control

WB : HeLa, 293T, SH-SY5Y, HepG2 cell lysates. IHC staining : Human normal endometrial tissue, Human endometrial cancer tissue, Human normal kidney tissue Western blot: 1:2000 - 1:4000, ELISA, IHC-P.

Application & Usage

Other Names Peroxiredoxin 2, NKEFB, PRP, PRX2, PRXII, TDPX1, TSA, PRDX2.

Target/Specificity Peroxiredoxin II

Antibody Form Liquid

Appearance Colorless liquid

Formulation 100 μl of antibody in HEPES with 0.15 M NaCl, 0.01 % BSA, 0.03 % sodium azide, and 50 % glycerol

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions



Peroxiredoxin II Antibody (1E8) is for research use only and not for use in diagnostic or therapeutic procedures.

Peroxiredoxin II Antibody (1E8) - Protein Information

Name PRDX2

Synonyms NKEFB, TDPX1

Function

Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively. Plays a role in cell protection against oxidative stress by detoxifying peroxides and as sensor of hydrogen peroxide-mediated signaling events. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H(2)O(2).

Cellular Location Cytoplasm.

Peroxiredoxin II Antibody (1E8) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Peroxiredoxin II Antibody (1E8) - Images

Peroxiredoxin II Antibody (1E8) - Background

Peroxiredoxin (Prx) is a growing peroxidase family, whose mammalian members have been known to connect with cell proliferation, differentiation, and apoptosis. Many isoforms (about 50 proteins), collected in accordance to the amino acid sequence homology, particularly amino-terminal region containing active site cysteine residue, and the thiol-specific antioxidant activity, distribute throughout all the kingdoms. Among them, mammalian Prx consists of 6 different members grouped into typical 2-Cys, atypical 2-Cys Prx, and 1-Cys Prx. Except Prx VI belonging to 1-Cys Prx subgroup, the other five 2-Cys Prx isotypes have the thioredoxin-dependent peroxidase (TPx) activity utilizing thioredoxin, thioredoxin reductase, and NADPH as a reducing system. Mammalian Prxs are 20 – 30 kDa in molecular size and vary in subcellular localization: Prx I, II, and VI in cytosol, Prx III in mitochondria, Prx IV in ER and secretion, Prx V showing complicated distribution including peroxisome, mitochondria and cytosol. Prx II is involved in redox regulation of the cell. Reduces peroxides with reducing equivalents provided through the thioredoxin system. It is not able to receive electrons 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 H2O2.