

Immunotag™ PRX II Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT3872
Product Description	Immunotag™ PRX II Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PRX II
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from the C-terminal region of human PRX II
Specificity	PRX II Polyclonal Antibody detects endogenous levels of PRX II protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	PRDX2
Accession No.	P32119 Q61171 P35704
Alternate Names	PRDX2; NKEFB; TDPX1; Peroxiredoxin-2; Natural killer cell-enhancing factor B; NKEF-B; PRP; Thiol-specific antioxidant protein; TSA; Thioredoxin peroxidase 1; Thioredoxin-dependent peroxide reductase 1

Antibody Specification

Description	peroxiredoxin 2(PRDX2) Homo sapiens 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],
Protein Expression	Brain,Cajal-Retzius cell,Cerebellum,Colon carcinoma,Erythrocyte,Fetal brain cortex,Hypothal
Subcellular Localization	cell,cytoplasm,cytosol,extracellular exosome,
Protein Function	catalytic activity:2 R'-SH + ROOH = R'-S-S-R' + H(2)O + ROH.,function: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 H(2)O(2).,miscellaneous:Inactivated upon oxidative stress by overoxidation of Cys-51 to Cys-SO(2)H and Cys-SO(3)H. Cys-SO(2)H is retroreduced to Cys-SOH after removal of H(2)O(2), while Cys-SO(3)H may be irreversibly oxidized.,miscellaneous:The active site is the redox-active Cys-51 oxidized to Cys-SOH. Cys-SOH rapidly reacts with Cys-172-SH of the other subunit to form an intermolecular disulfide with a concomitant homodimer formation. The enzyme may be subsequently regenerated by reduction of the disulfide by thioredoxin.,similarity:Belongs to the ahpC/TSA family.,similarity:Contains 1 thioredoxin domain.,subunit:Homodimer; disulfide-linked, upon oxidation. May be found as a toroid-shaped decamer composed of 5 dimers, depending on pH and calcium concentration. Interacts with TIPIN.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.