

Immunotag™ PRX III Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT3873
Product Description	Immunotag™ PRX III 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 III
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000.IHC-p:1:50-300 ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from the Internal region of human PRX III
Specificity	PRX III Polyclonal Antibody detects endogenous levels of PRX III 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	PRDX3
Accession No.	P30048 P20108 Q9Z0V6
Alternate Names	PRDX3; AOP1; Thioredoxin-dependent peroxide reductase; mitochondrial; Antioxidant protein 1; AOP-1; HBC189; Peroxiredoxin III; Prx-III; Peroxiredoxin-3; Protein MER5 homolog

Antibody Specification

Description	peroxiredoxin 3 (PRDX3) Homo sapiens This gene encodes a mitochondrial protein with antioxidant function. The protein is similar to the C22 subunit of Salmonella typhimurium alkylhydroperoxide reductase, and it can rescue bacterial resistance to alkylhydroperoxide in E. coli that lack the C22 subunit. The human and mouse genes are highly conserved, and they map to the regions syntenic between mouse and human chromosomes. Sequence comparisons with recently cloned mammalian homologs suggest that these genes consist of a family that is responsible for the regulation of cellular proliferation, differentiation and antioxidant functions. This family member can protect cells from oxidative stress, and it can promote cell survival in prostate cancer. Alternative splicing of this gene results in multiple transcript variants. Related pseudogenes have been identified on chromosomes 1, 3, 13 and 22. [provided by RefSeq, Oct 2014],
Protein Expression	Blood,Bone marrow,Brain,Cajal-Retzius cell,Cerebellum,Fetal brain cortex,Liver,Lung,Skeleta
Subcellular Localization	cytoplasm,mitochondrion,mitochondrial matrix,early endosome,cytosol,IkappaB kinase complex,myelin sheath,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. Protects radical-sensitive enzymes from oxidative damage by a radical-generating system. Acts synergistically with MAP3K13 to regulate the activation of NF-kappa-B in the cytosol.,miscellaneous:Irreversibly inactivated by overoxidation of Cys-108 (to Cys-SO(3)H) upon oxidative stress.,miscellaneous:The active site is the redox-active Cys-108 oxidized to Cys-SOH. Cys-SOH rapidly reacts with Cys-229-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 (By similarity). Binds MAP3K13.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.