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PRDX3 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant PRDX3.
Catalog # AT3422a

Product Information

Application	WB, IF, IP, E
Primary Accession	P30048
Other Accession	BC002685
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	1E3-B2
Calculated MW	27693

Additional Information

Gene ID	10935
Other Names	Thioredoxin-dependent peroxide reductase, mitochondrial, Antioxidant protein 1, AOP-1, HBC189, Peroxiredoxin III, Prx-III, Peroxiredoxin-3, Protein MER5 homolog, PRDX3, AOP1
Target/Specificity	PRDX3 (AAH02685, 1 a.a. ~ 256 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 IP~~N/A E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	PRDX3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

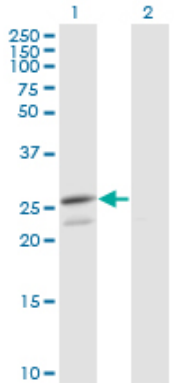
Background

This gene encodes a protein with antioxidant function and is localized in the mitochondrion. This gene shows significant nucleotide sequence similarity to the gene coding for the C22 subunit of Salmonella typhimurium alkylhydroperoxide reductase. Expression of this gene product in E. coli deficient in the C22-subunit gene rescued resistance of the bacteria to alkylhydroperoxide. 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 homologues suggest that these genes consist of a family that is responsible for regulation of cellular proliferation, differentiation, and antioxidant functions. Two transcript variants encoding two different isoforms have been found for this gene.

References

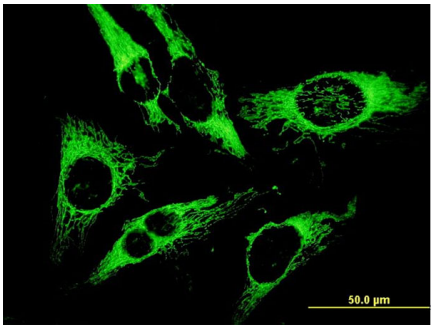
[Expression of peroxiredoxin III cervical lesions] Li LQ, et al. Zhonghua Shi Yan He Lin Chuang Bing Du Xue Za Zhi, 2009 Dec. PMID 20718351.New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.Silencing the Peroxiredoxin III gene inhibits cell proliferation in breast cancer. Chua PJ, et al. Int J Oncol, 2010 Feb. PMID 20043069.Knockdown of the type 3 iodothyronine deiodinase (D3) interacting protein peroxiredoxin 3 decreases D3-mediated deiodination in intact cells. Aerts G, et al. Endocrinology, 2009 Nov. PMID 19819956.Redox potential and peroxide reactivity of human peroxiredoxin 3. Cox AG, et al. Biochemistry, 2009 Jul 14. PMID 19462976.

Images

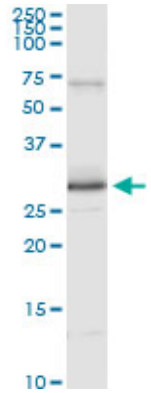


Western Blot analysis of PRDX3 expression in transfected 293T cell line by PRDX3 monoclonal antibody (M01), clone 1E3-B2.

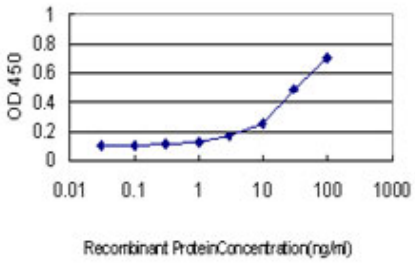
Lane 1: PRDX3 transfected lysate (Predicted MW: 27.7 KDa).
Lane 2: Non-transfected lysate.



Immunofluorescence of monoclonal antibody to PRDX3 on HeLa cell . [antibody concentration 10 ug/ml]



Immunoprecipitation of PRDX3 transfected lysate using anti-PRDX3 monoclonal antibody and Protein A Magnetic Bead (U0007), and immunoblotted with PRDX3 MaxPab rabbit polyclonal antibody.



Detection limit for recombinant GST tagged PRDX3 is approximately 1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.