

For Research Use Only

PRDX1 Recombinant monoclonal antibody

Catalog Number: 86589-1-RR



Basic Information

Catalog Number: 86589-1-RR	GenBank Accession Number: BC007063	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 5052	CloneNo.: 251425E8
Source: Rabbit	UNIPROT ID: Q06830	Recommended Dilutions: WB: 1:5000-1:50000 IHC: 1:250-1:1000 IF/ICC: 1:200-1:800
Isotype: IgG	Full Name: peroxiredoxin 1	
Immunogen Catalog Number: AG8602	Calculated MW: 199 aa, 22 kDa	
	Observed MW: 23 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Species Specificity:
human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : K-562 cells, Jurkat cells, A549 cells, NIH/3T3 cells, HSC-T6 cells, mouse kidney tissue

IHC : mouse kidney tissue,

IF/ICC : K-562 cells, NIH/3T3 cells

Background Information

PRDX1 (Peroxiredoxin-1), also named as PAGA, PAGB, TDPX2, PAG or NKEF-A, belongs to the ahpC/TSA family. PRDX1 is a thiol reductase that plays critical roles in oxidative and thermal stress defense mechanisms through its abilities to metabolize H₂O₂ and act as a molecular chaperone, respectively. PRDX1 might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H₂O₂ (PMID: 9497357). It reduces an intramolecular disulfide bond in GPD5 that gates the ability to GPD5 to drive postmitotic motor neuron differentiation. PRDX1 can form a dimer, and also can be phosphorylated on Thr-90 during the M-phase, which leads to a more than 80% decrease in enzymatic activity (PMID: 22583657, 11986303).

Storage

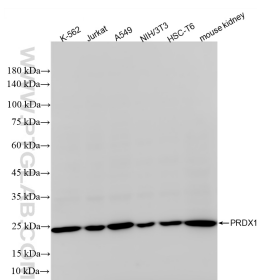
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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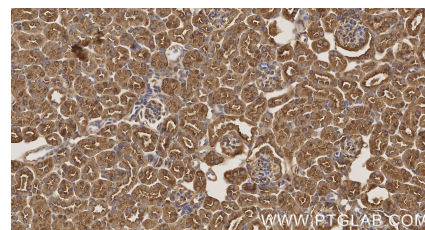
Selected Validation Data



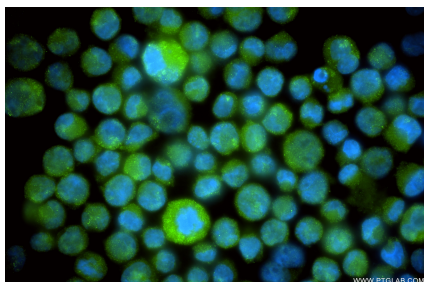
K-562 cells were subjected to SDS PAGE followed by western blot with 86589-1-RR (PRDX1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



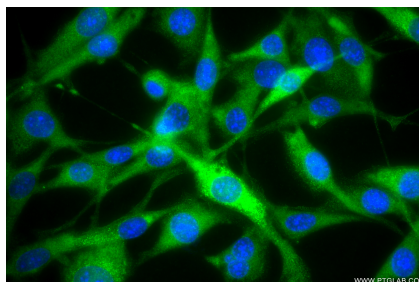
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 86589-1-RR (PRDX1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 86589-1-RR (PRDX1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed K-562 cells using PRDX1 antibody (86589-1-RR, Clone: 251425E8) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunofluorescent analysis of (-20°C Methanol) fixed NIH/3T3 cells using PRDX1 antibody (86589-1-RR, Clone: 251425E8) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).