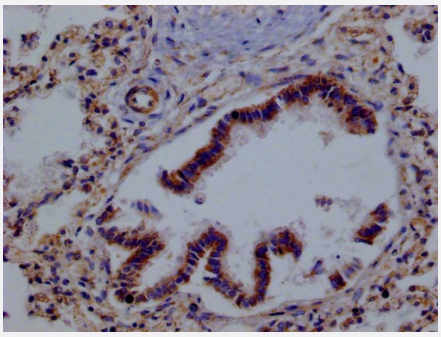
RecomAb™

PRDX3 recombinant monoclonal antibody, clone 14E2

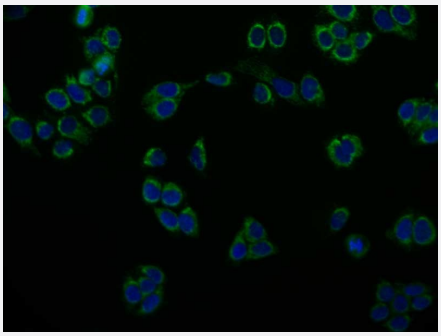
Catalog # RAB07567 Size 100 uL

Applications



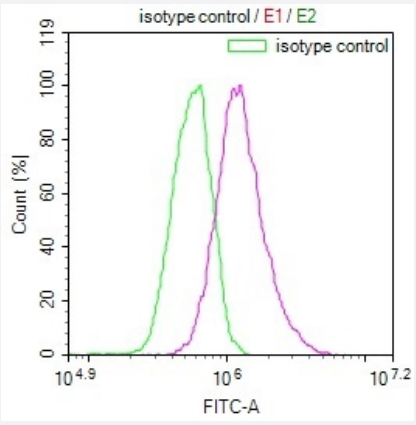
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human lung tissue using PRDX3 recombinant monoclonal antibody, clone 14E2 (Cat # RAB07567) on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence

Immunofluorescent staining of PC-3 Cells with PRDX3 recombinant monoclonal antibody, clone 14E2 (Cat # RAB07567), counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 503-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Flow Cytometry

Flow cytometry shows HepG2 cells stained with PRDX3 recombinant monoclonal antibody, clone 14E2 (Cat # RAB07567)(red line). The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1*10^{6}cells) for 45min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4°C. Control antibody (green line) was rabbit IgG (1ug/1*10^{6}cells) used under the same conditions. Acquisition of >10,000 events was performed.

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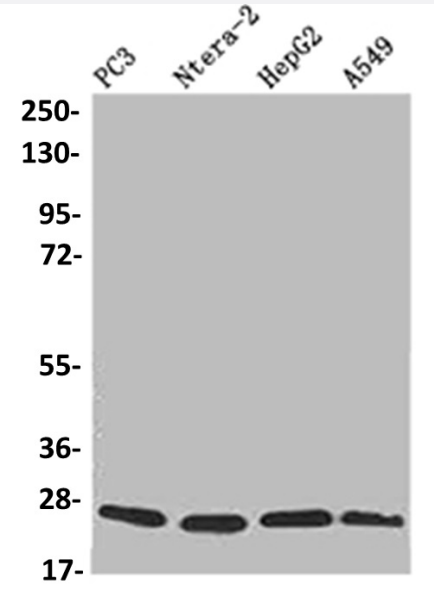

Western Blot (Cell lysate)

Western blot analysis of PC3 whole cell lysate, Ntera-2 whole cell lysate, HepG2 whole cell lysate, A549 whole cell lysate with PRDX3 recombinant monoclonal antibody, clone 14E2 (Cat # RAB07567).

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human PRDX3.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide corresponding to human PRDX3.
Theoretical MW (kDa)	Calculated MW: 28, 2
Reactivity	Human
Form	Liquid
Preparation Method	Mammalian cell (HEK293) expression system
Purification	Affinity chromatography purification
Isotype	IgG
Recommend Usage	ELISA Flow Cytometry(1:50-1:200) Immunofluorescence (1:50-1:200) Immunohistochemistry (1:50-1:200) Western Blot (1:500-1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH7.4 (150 mM NaCl, 0.02% sodium azide and 50% glycerol)

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Storage Instruction	Store at -20°C or -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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- Enzyme-linked Immunoabsorbent Assay

- Western Blot (Cell lysate)

  Western blot analysis of PC3 whole cell lysate, Ntera-2 whole cell lysate, HepG2 whole cell lysate, A549 whole cell lysate with PRDX3 recombinant monoclonal antibody, clone 14E2 (Cat # RAB07567).

Gene Info — PRDX3

Entrez GeneID	10935
Protein Accession#	P30048
Gene Name	PRDX3

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Gene Alias	AOP-1, AOP1, MER5, MGC104387, MGC24293, PRO1748, SP-22
Gene Description	peroxiredoxin 3
Omim ID	604769
Gene Ontology	Hyperlink
Gene Summary	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. [provided by RefSeq
Other Designations	OTTHUMP00000020590|antioxidant protein 1|thioredoxin-dependent peroxide reductase

Disease

- Alzheimer disease
- Cognition
- Genetic Predisposition to Disease

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