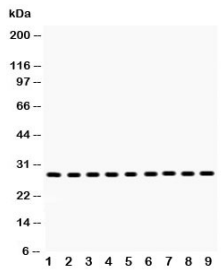
PRDX3 Antibody / Peroxiredoxin 3 (R31762)

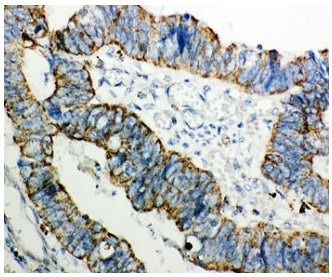
Catalog No.	Formulation	Size
R31762	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

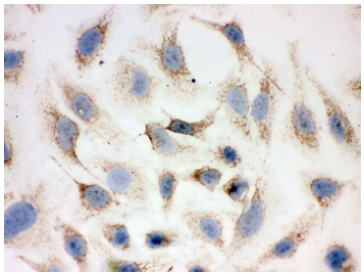
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA, 0.025% sodium azide
Gene ID	10935
Localization	Cytoplasmic
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml Immunocytochemistry (FFPE): 0.5-1ug/ml Immunofluorescence: 2-4ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This PRDX3 antibody is available for research use only.



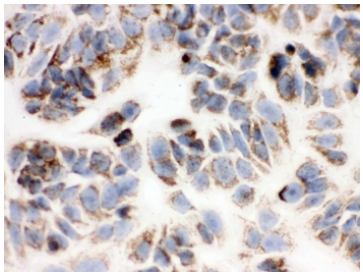
Western blot testing of PRDX3 antibody and Lane 1: rat brain; 2: mouse brain; 3: rat skeletal muscle; 4: mouse skeletal muscle; 5: human U-2 0S; 6: HeLa; 7: SMMC-7721; 8: RH35; 9: A549 lysate. Expected molecular weight: ~28 kDa.



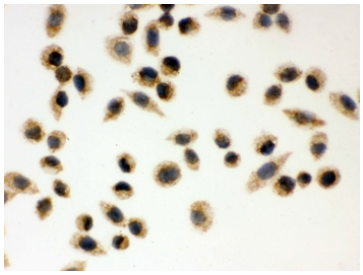
IHC-P: PRDX3 antibody testing of human intestinal cancer tissue. HIER: steamed with pH6 citrate buffer.



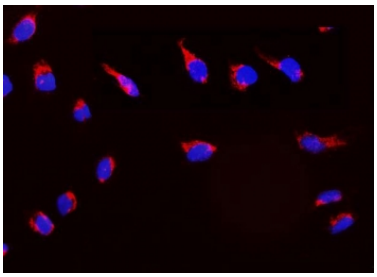
ICC testing of FFPE human HeLa cells with PRDX3 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



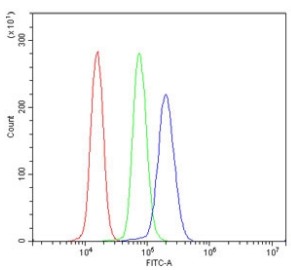
ICC testing of FFPE human MCF7 cells with PRDX3 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



ICC testing of FFPE human SMMC-7721 cells with PRDX3 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



Immunofluorescent staining of FFPE human U-2 OS cells with PRDX3 antibody (red) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of human U937 cells with PRDX3 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= PRDX3 antibody.

Description

Peroxiredoxin 3, also known as AOP-1, MER5, SP-22 or PRX3, is localized exclusively in mitochondria. The deduced 256-amino acid human protein shares 86% amino acid sequence similarity with mouse, and significant similarity with both the human proliferation-associated gene A product and the mouse stress-induced peritoneal macrophage protein Msp23. The PRDX3 gene is mapped on 10q26.11. Expression of Peroxiredoxin 3 is induced by MYC and is reduced in c-myc -/- cells. Chromatin immunoprecipitation analysis spanning the entire PRDX3 genomic sequence revealed that MYC binds preferentially to a 930-bp region surrounding exon 1. Results using mitochondria-specific fluorescent probes demonstrated that Peroxiredoxin 3 is essential for maintaining mitochondrial mass and membrane potential in transformed rat and human cells. These data provided evidence that PRDX3 is a MYC target gene that is required to maintain normal mitochondrial function.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the PRDX3 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human partial recombinant protein (AA 110-256) was used as the immunogen for this PRDX3 antibody.

Storage

After reconstitution, the PRDX3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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