

Anti-Peroxiredoxin 3 Antibody

Catalog # ABO11143

Product Information

Application	WB, IHC-P, ICC
Primary Accession	P30048
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Thioredoxin-dependent peroxide reductase, mitochondrial (PRDX3) detection. Tested with WB, IHC-P, ICC in Human; Mouse; Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	10935
Other Names	Thioredoxin-dependent peroxide reductase, mitochondrial, 1.11.1.15, Antioxidant protein 1, AOP-1, HBC189, Peroxiredoxin III, Prx-III, Peroxiredoxin-3, Protein MER5 homolog, PRDX3, AOP1
Calculated MW	27693
Application Details	Immunocytochemistry , 0.5-1 μ g/ml, Human, - Immunohistochemistry (Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Rat, Mouse
Subcellular Localization	Mitochondrion.
Source	Eukaryota
Protein Name	Thioredoxin-dependent peroxide reductase, mitochondrial
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Peroxiredoxin 3 (239-256aa TIKPSAASKEYFQKVNQ), different from the related mouse and rat sequences by three amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20° C for one year. After r° Constitution, at 4° C for one month. It° Can also be aliquotted and stored frozen at -20° C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the AhpC/TSA family.

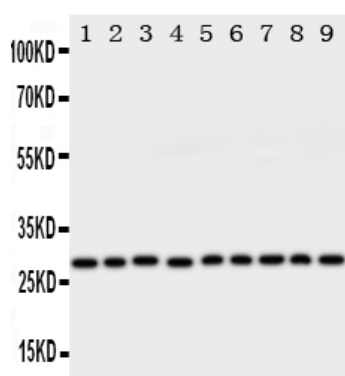
Protein Information

Name	PRDX3
Synonyms	AOP1
Function	Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively. Plays a role in cell protection against oxidative stress by detoxifying peroxides (PubMed: 17707404 , PubMed: 29438714 , PubMed: 33889951 , PubMed: 7733872). Acts synergistically with MAP3K13 to regulate the activation of NF-kappa-B in the cytosol (PubMed: 12492477). Required for the maintenance of physical strength (By similarity).
Cellular Location	Mitochondrion. Cytoplasm. Early endosome. Note=Localizes to early endosomes in a RPS6KC1-dependent manner.

Background

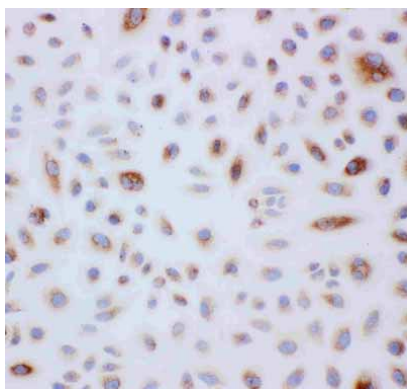
PRDX3(peroxiredoxin 3) also known as AOP-1, MER5, SP-22 or PRX3, is localized exclusively in mitochondria. The deduced 256-amino acid human AOP1 protein shares 86% amino acid sequence similarity with mouse Aop1, and significant similarity with both the human proliferation-associated gene A product and the mouse stress-induced peritoneal macrophage protein Msp23. □The PRDX3 gene is mapped on 10q26.11. Expression of □PRDX3 □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 □PRDX3 □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.

Images

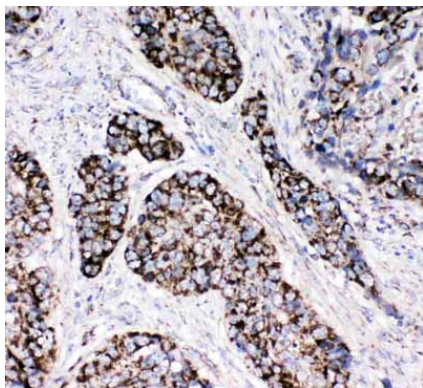


Anti-Peroxiredoxin 3 antibody, ABO11143, Western blotting
 All lanes: Anti Peroxiredoxin 3 (ABO11143) at 0.5ug/ml
 Lane 1: Rat Brain Tissue Lysate at 50ug
 Lane 2: Rat Lung Tissue Lysate at 50ug
 Lane 3: Rat Liver Tissue Lysate at 50ug
 Lane 4: Rat Kidney Tissue Lysate at 50ug
 Lane 5: HELA Whole Cell Lysate at 40ug
 Lane 6: JURKAT Whole Cell Lysate at 40ug
 Lane 7: 293T Whole Cell Lysate at 40ug
 Lane 8: MCF-7 Whole Cell Lysate at 40ug
 Lane 9: A549 Whole Cell Lysate at 40ug
 Predicted bind size: 28KD
 Observed bind size: 28KD

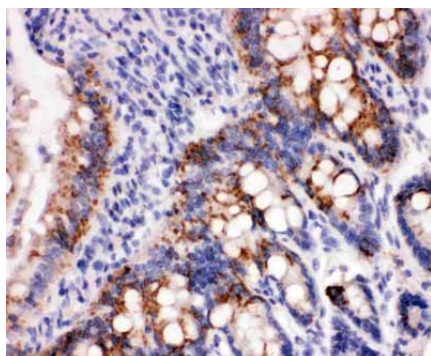
Anti-Peroxiredoxin 3 antibody, ABO11143, ICCICC: A549 Cell



Anti-Peroxiredoxin 3 antibody, ABO11143, IHC(P)IHC(P):
Human Lung Cancer Tissue



Anti-Peroxiredoxin 3 antibody, ABO11143, IHC(P)IHC(P):
Rat Intestine Tissue



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