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Anti-Peroxiredoxin 3 Antibody

Catalog # AP51445

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P30048
Reactivity	Human, Mouse, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27693

Additional Information

Gene ID	10935
Other Names	AOP1; Thioredoxin-dependent peroxide reductase mitochondrial; Antioxidant protein 1; AOP-1; HBC189; Peroxiredoxin III; Prx-III; Peroxiredoxin-3; Protein MER5 homolog
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Peroxiredoxin 3. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

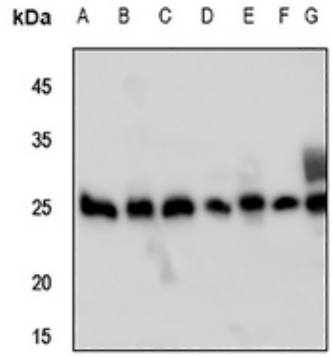
Protein Information

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.

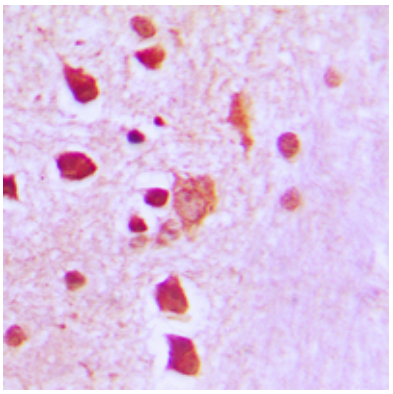
References

Tsuji K.,et al.Biochem. J. 307:377-381(1995).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Ebert L.,et al.Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.
Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
Deloukas P.,et al.Nature 429:375-381(2004).

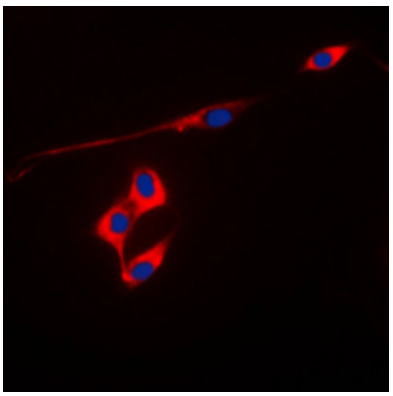
Images



Western blot analysis of Peroxiredoxin 3 expression in HEK293T (A), Hela (B), H446 (C), mouse lung (D), mouse liver (E), rat lung (F), rat liver (G) whole cell lysates. (Predicted band size: 27; 25 kD; Observed band size: 27; 25 kD)



Immunohistochemical analysis of Peroxiredoxin 3 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Peroxiredoxin 3 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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