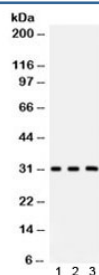


Peroxiredoxin 4 Antibody (R32208)

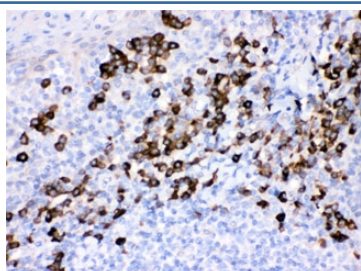
Catalog No.	Formulation	Size
R32208	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

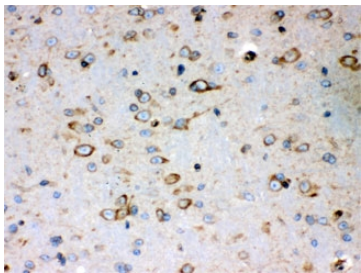
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	Q13162
Localization	Cytoplasmic
Applications	Western Blot : 0.1-0.5ug/ml IHC (FFPE) : 0.5-1ug/ml ICC : 0.5-1ug/ml
Limitations	This Peroxiredoxin 4 antibody is available for research use only.



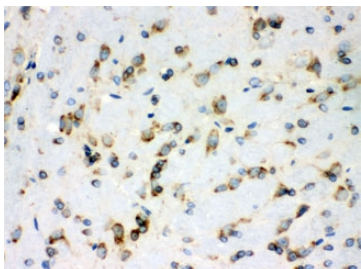
Western blot testing of 1) rat brain, 2) mouse brain and 3) human HeLa lysate with Peroxiredoxin 4 antibody. Expected/observed molecular weight ~31 kDa.



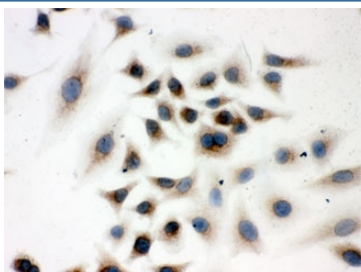
IHC testing of FFPE human tonsil with Peroxiredoxin 4 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE mouse brain with Peroxiredoxin 4 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE rat brain with Peroxiredoxin 4 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



ICC testing of human A549 cells with Peroxiredoxin 4 antibody.

Description

PRDX4 (Peroxiredoxin 4) is also known as AOE37-2. The protein encoded by this gene is an antioxidant enzyme and belongs to the peroxiredoxin family. Functional analysis showed that PRDX4 protects glutamine synthetase from inactivation. Yeast 2-hybrid, immunoprecipitation, and immunoblot analyses indicated that PRDX4 and PRDX1 are capable of homodimerization and heterodimerization with each other but not with the mitochondrial PRDX3. Gel mobility shift and immunoblot analysis found that PRDX4 depletes NFkB binding activity together with a reduction in the amounts of p50, p65, and phosphorylated IKBA, as well as a reduction in the expression of HIV-1 viral proteins. Expression of PRDX4, alone or with PRDX1, increased the resistance of yeast cells to oxidant-induced toxicity. Jin et al. suggested PRDX4 modulates IKBA phosphorylation in the cytoplasm and thus affects a peroxiredoxin-dependent redox step.

Application Notes

Optimal dilution of the Peroxiredoxin 4 antibody should be determined by the researcher.

Immunogen

Amino acids SDLTHQISKDYGVYLED SGHTLRGLFIIDDK of human Peroxiredoxin 4 were used as the immunogen for the Peroxiredoxin 4 antibody.

Storage

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

