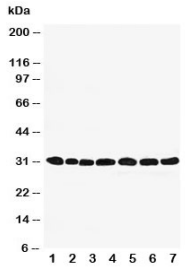
Peroxiredoxin 4 Antibody (PRDX4) (R30935)

Catalog No.	Formulation	Size
R30935	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 and 0.025% sodium azide/thimerosal
UniProt	Q13162
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Peroxiredoxin 4 antibody is available for research use only.



Western blot testing of Peroxiredoxin 4 antibody and Lane 1: rat brain; 2: (r) lung; 3: (r) liver; 4: (r) kidney; 5: human HeLa; 6: (h) 293T; 7: (h) MCF-7 cell lysate. Expected size: ~31KD

Description

Peroxiredoxin 4 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.(1997) suggested Peroxiredoxin 4 modulates IKBA phosphorylation in the cytoplasm and thus

affects a peroxiredoxin-dependent redox step.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Peroxiredoxin 4 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human PRDX4 (SETIIPDPAGKLKYFDKLN) was used as the immunogen for this Peroxiredoxin 4 antibody (100% homologous in human, mouse and rat).

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.