

Human Peroxiredoxin 3/PRDX3 antibody

Catalog Number: ATGA0407

PRODUCT INFORMATION

Catalog number

ATGA0407

Clone No.

AT1F8

Product type

Monoclonal Antibody

UnitProt No.

P30048

NCBI Accession No.

NP_006784

Alternative Names

Thioredoxin-dependent peroxide reductase mitochondrial, Thioredoxin-dependent peroxide reductase mitochondrial, PRDX3, PRX III, Antioxidant protein 1 (AOP-1), Peroxiredoxin 3, Thioredoxin-dependent peroxide reductase, mitochondrial Antioxidant Protein 1, AOP1, MER5, PRX3, SP22, Peroxiredoxin-3

PRODUCT SPECIFICATION

Antibody Host

Mouse

Reacts With

Human

Concentration

1mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen

Recombinant human Peroxiredoxin3 (63-256aa) purified from E. coli

Isotype

IgG3 kappa

Purification Note

By protein-A affinity chromatography

Application

ELISA, WB, ICC/IF

Usage

The antibody has been tested by ELISA, Western blot and ICC/IF analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

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Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

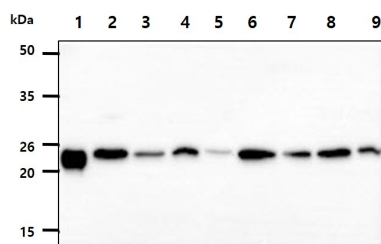
Peroxiredoxin 3, also known as PRDX3, is a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. Peroxiredoxin 3 is specifically localized in mitochondria and believed to play important roles in the regulation of cellular redox status by serving as a primary line of defense against H₂O₂ produced during respiration.

General References

Tsuji K., et al. (1995) *Biochem J.* 307(2): 377-381.
Watabe S., et al. (1997) *Eur J Biochem.* 249(1): 52-60.

DATA

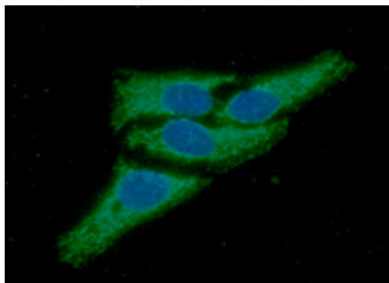
Western blot analysis (WB)



The recombinant protein (50ng) and cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Peroxiredoxin3 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: Recombinant human PRDX3 protein
Lane 2.: HeLa cell lysate
Lane 3.: HepG2 cell lysate
Lane 4.: TF1 cell lysate
Lane 5.: U87MG cell lysate
Lane 6.: Raji cell lysate
Lane 7.: 293T cell lysate
Lane 8.: Jurkat cell lysate
Lane 9.: MCF7 cell lysate

Immunocytochemistry/Immunofluorescence (ICC/IF)



ICC/IF analysis of Peroxiredoxin3 in HeLa cells. The cell was stained with ATGA0407 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).