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Peroxiredoxin V Antibody (3F11)

Mouse Monoclonal Antibody

Catalog # ABV11155

Specification

Peroxiredoxin V Antibody (3F11) - Product Information

Application	**WB, ICC, E, IP**
Primary Accession	P30044
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG 1**
Calculated MW	**22086**

Peroxiredoxin V Antibody (3F11) - Additional Information

Gene ID 25824

Positive Control	**IP analysis : HeLa cell lysate. IHC staining : HeLa cells**
Application & Usage	**Western blot: 1:1000, IP: 1-2 µl, ICC: 20 µl/ml, ELISA.**

Other Names
Peroxiredoxin 5, ACR1, AOEB116, B116, PLP, PMP20, PRDX6, PRXV, SBBI10.

Target/Specificity
Peroxiredoxin V

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µl of antibody in HEPES with 0.15 M NaCl, 0.01 % BSA, 0.03 % sodium azide, and 50 % glycerol

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
Peroxiredoxin V Antibody (3F11) is for research use only and not for use in diagnostic or therapeutic procedures.

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Peroxiredoxin V Antibody (3F11) - Protein Information

Name PRDX5 (HGNC:9355)

Synonyms ACR1

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 and as sensor of hydrogen peroxide-mediated signaling events.

Cellular Location
[Isoform Mitochondrial]: Mitochondrion

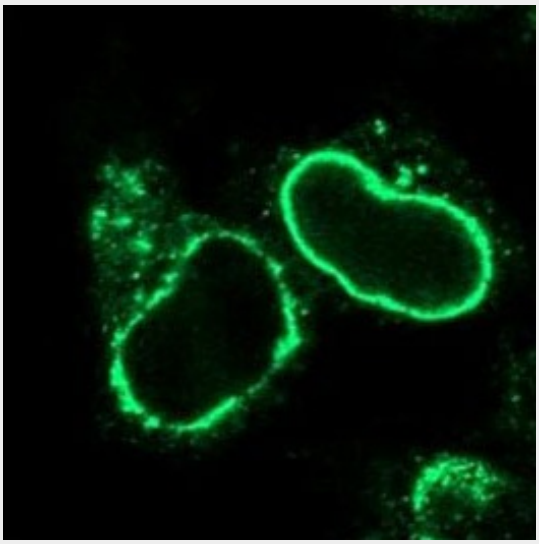
Tissue Location
Widely expressed..

Peroxiredoxin V Antibody (3F11) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Peroxiredoxin V Antibody (3F11) - Images



IHC staining of HeLa cells with Prx IV mAb.

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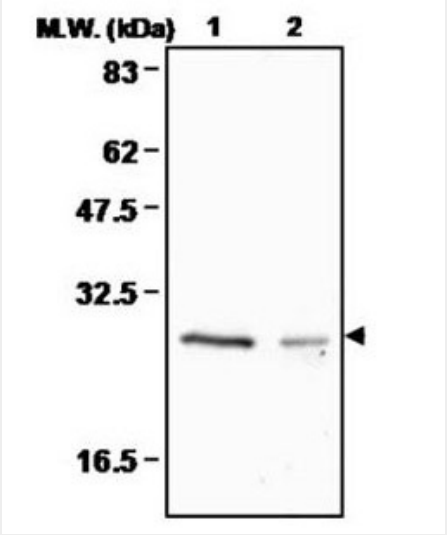

IP analysis of HeLa cell lysate with Prx IV mAb. Lane 1: Input. Lane 2: IP sample

Peroxiredoxin V Antibody (3F11) - Background

Peroxiredoxin (Prx) is a growing peroxidase family, whose mammalian members have been known to connect with cell proliferation, differentiation, and apoptosis. Many isoforms (about 50 proteins), collected in accordance to the amino acid sequence homology, particularly amino-terminal region containing active site cysteine residue, and the thiol-specific antioxidant activity, distribute throughout all the kingdoms. Among them, mammalian Prx consists of 6 different members grouped into typical 2-Cys, atypical 2-Cys Prx, and 1-Cys Prx. Except Prx VI belonging to 1-Cys Prx subgroup, the other five 2-Cys Prx isotypes have the thioredoxin-dependent peroxidase (TPx) activity utilizing thioredoxin, thioredoxin reductase, and NADPH as a reducing system. Mammalian Prxs are 20 – 30 kDa in molecular size and vary in subcellular localization: Prx I, II, and VI in cytosol, Prx III in mitochondria, Prx IV in ER and secretion, Prx V showing complicated distribution including peroxisome, mitochondria and cytosol. Prx V is involved in reduction of hydrogen peroxide and alkyl hydroperoxides with reducing equivalents provided through the thioredoxin system. Involved in intracellular redox signaling.