For Research Use Only

# PRDX1 Monoclonal antibody, PBS Only

Catalog Number:66820-1-PBS

Featured Product



## **Basic Information**

Catalog Number: 66820-1-PBS Size: 100ug , Concentration: 1mg/ml by Nanodrop; Source: Mouse Isotype: IgG1 Immunogen Catalog Number: AG8821 GenBank Accession Number: BC007063 GeneID (NCBI): 5052 UNIPROT ID: Q06830 Full Name: peroxiredoxin 1 Calculated MW: 199 aa, 22 kDa Observed MW: 23 kDa

#### Purification Method: Protein A purification CloneNo.: 2B2A2

# **Applications**

Tested Applications: WB, IHC, IF-P, Indirect ELISA Species Specificity: human, mouse, rat

## **Background Information**

PRDX1(Peroxiredoxin-1), also named as PAGA, PAGB, TDPX2, PAG or NKEF-A, belongs to the ahpC/TSA family. PRDX1 is a thiol reductase that plays critical roles in oxidative and thermal stress defense mechanisms through its abilities to metabolize H2O2 and act as a molecular chaperone, respectively. PRDX1 might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H2O2 ((PMID: 9497357)). It reduces an intramolecular disulfide bond in GDPD5 that gates the ability to GDPD5 to drive postmitotic motor neuron differentiation. PRDX1 can form a dimer, and also can be phosphorylated on Thr-90 during the M-phase, which leads to a more than 80% decrease in enzymatic activity (PMID: 22583657, 11986303).

## Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

For technical support and original validation data for this product please contact:T: 1 (888) 4PTGLAB (1-888-478-4522) (toll freeE: proteintech@ptglab.comin USA), or 1(312) 455-8498 (outside USA)W: ptglab.com

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# Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66820-1-1g (PRDX1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66820-1-PBS in a different storage buffer formulation.



U2OS (WT and PRDX1 KO) lysates prepared with RIPA buffer, 10 µg protein loaded. 66820-1-lg incubated at 1:5000 at 4°C overnight in 5% BSA in TBST. Ponceau stained transfers shown on right. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency. This data was developed using the same antibody clone with 66820-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using PRDX1 antibody (66820-1-Ig, Clone: 2B2A2) at dilution of 1:400 and Coralite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66820-1-PBS in a different storage buffer formulation.



Various lysates were subjected to SDS PAGE followed by western blot with 66820-1-Ig (PRDX1 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66820-1-PBS in a different storage buffer formulation.



WB result of PRDX1 antibody (66820-1-lg; 1:200000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PRDX1 transfected HEK-293 cells. This data was developed using the same antibody clone with 66820-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66820-1-Ig (PRDX1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66820-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66820-1-Ig (PRDX1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66820-1-PBS in a different storage buffer formulation.