## For Research Use Only

## PRDX6 Monoclonal antibody

Catalog Number:67499-1-lg Featured Product



**Basic Information** 

Catalog Number: 67499-1-lg Concentration:

1000 ug/ml
Source:
Mouse
Isotype:
IgG2a

Immunogen Catalog Number: AG4727

> Observed MW: 25-30 kDa

Purification Method:

Protein A purification

CloneNo.: 3C12D3

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:1000-1:4000 IF/ICC 1:400-1:1600

Applications

Tested Applications: WB, IHC, IF/ICC, IP, ELISA Species Specificity: human, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: LNCaP cells, HAP1 cells, A549 cells, HeLa cells, HEK-293 cells, Jurkat cells, K-562 cells, pig brain tissue, HepG2 cells

IHC: human liver tissue,
IF/ICC: HeLa cells, HAP1

## **Background Information**

PRDX6 (Peroxiredoxin-6), also named as AOP2 or KIAAO106, is a unique member of the peroxiredoxin family of antioxidants. PRDX6 is highly expressed in liver and protects cells from oxidative damage by reducing H2O2 and various lipid Peroxides (PMID: 17382207). It can form a dimer(PMID:20500660).PRDX6 is expressed in all major organs, with a particularly high level in lung (PMID:15890616). Prdx6 is detected at approximately 24 to 28 kDa, and can be monosumoylated with the molecular mass of about 40 kDa (PMID: 24910119).

GenBank Accession Number:

BC035857

9588

P30041

GeneID (NCBI):

UNIPROT ID:

Full Name:

peroxiredoxin 6
Calculated MW:

224 aa, 25 kDa

Storage

Storage:

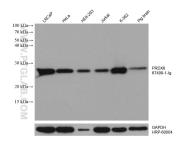
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

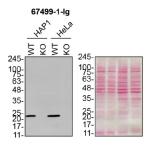
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

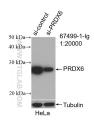
## Selected Validation Data



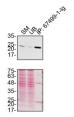
Various lysates were subjected to SDS PAGE followed by western blot with 67499-1-lg (PRDX6 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



HAP1 and HeLa (WT and PRDX6 KO) lysates prepared with RIPA buffer, 25ug protein loaded. 67499-1-Ig incubated at 1:1000 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.

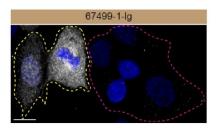


WB result of PRDX6 antibody (67499-1-Ig; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PRDX6 transfected HeLa cells.

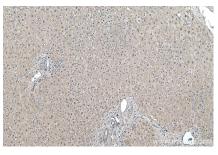


SM=10% starting material; UB=10% unbound fraction; IP=immunoprecipitate.

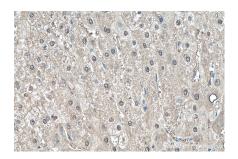
HAP1 lysates prepared and IP of peroxidoxin 6 performed using 2.0  $\mu$  g of 67499-1-lg coupled to protein G- Sepharose beads. Ponceau stained transfers shown for each blot. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency.



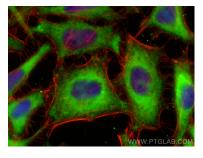
HAP1 WT cells (yellow outline) and PRDX6 KO cells (red outline) labelled with a green or a far red fluorescence dye, respectively. Cells fixed with 4% PFA and stained with 67499-1-lg at 1:1000 plus DAPI. Bars = 10  $\mu$  m. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency.



Immunohistochemical analysis of paraffinembedded human liver tissue slide using 67499-1-1g (PRDX6 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human liver tissue slide using 67499-1-1g (PRDX6 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using PRDX6 antibody (67499-1-Ig, Clone: 3C12D3) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).