

## Allgemeine Informationen

<b>Katalog-Nr.:</b> 15816-1-AP	<b>GenBank-Zugangsnummer:</b> BC007063	<b>Reinigungsmethode:</b> Antigen-Affinitätsreinigung
<b>Größe:</b> 150ul , Konzentration: 500 µg/ml von Nanodrop;	<b>GeneID (NCBI):</b> 5052	<b>Empfohlene Verdünnungen:</b> WB 1:5000-1:50000 IHC 1:100-1:400 IF 1:50-1:500
<b>Wirt:</b> Kaninchen	<b>Vollständiger Name:</b> peroxiredoxin 1	
<b>Isotyp:</b> IgG	<b>Berechnete Masse:</b> 199 aa, 22 kDa	
<b>Immunogen Katalognummer:</b> AG8602	<b>Beobachtete Masse:</b> 23 kDa	

## Anwendungen

### Geprüfte Anwendungen:

FC, IF, IHC, WB, ELISA

### In Publikationen genannte Anwendungen:

CoIP, IF, IHC, WB

### Getestete Reaktivität:

Human, Maus, Ratte

### Zitierte Arten:

Human, Maus, Ratte

### Positivkontrollen:

**WB** : A549-Zellen, HEK-293-Zellen, HeLa-Zellen, HepG2-Zellen, Mausnierengewebe, Rattennierengewebe, U2OS-Zellen

**IHC** : humanes Mammakarzinomgewebe, humanes Hirngewebe

**IF** : HeLa-Zellen, RAW 264.7-Zellen

**Hinweis-IHC: Antigenmaskierung mit TE-Puffer pH 9,0 empfohlen. (\*) Wahlweise kann die Antigenmaskierung auch mit Citratpuffer pH 6,0 erfolgen.**

## Hintergrundinformationen

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 H<sub>2</sub>O<sub>2</sub> 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 H<sub>2</sub>O<sub>2</sub> (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).

## Bemerkenswerte Veröffentlichungen

Verfasser	Pubmed ID	Journal	Anwendung
Lei Ye	33491741	Int J Oncol	WB
Wenjuan Qin	31506552	Sci Rep	WB
Ling Fu	31411056	Antioxid Redox Signal	WB

## Lagerung

### Lagerungsbedingungen:

Bei -20°C lagern. Nach dem Versand ein Jahr lang stabil

### Lagerungspuffer:

PBS mit 0.02% Natriumazid und 50% Glycerin pH 7.3.

Aliquotieren ist nicht notwendig bei -20°C Lagerung

**\*\*\* 20ul-Größen enthalten 0.1% BSA**

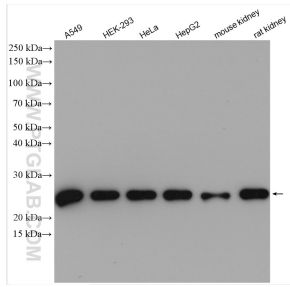
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

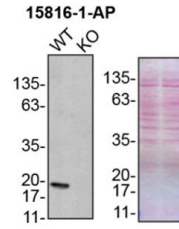
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

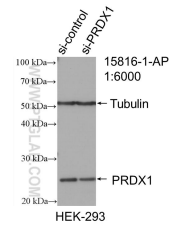
## Ausgewählte Validierungsdaten



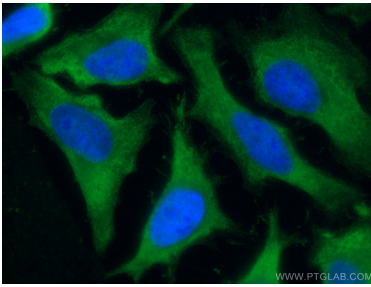
A549 cells were subjected to SDS PAGE followed by western blot with 15816-1-AP (PRDX1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



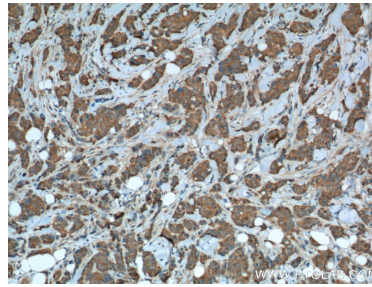
U2OS (WT and PRDX1 KO) lysates prepared with RIPA buffer, 10 µg protein loaded. 15816-1-AP incubated at 1:5000 at 4°C overnight in 5% BSA in TBST. Ponceau stained transfers shown on right. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency.



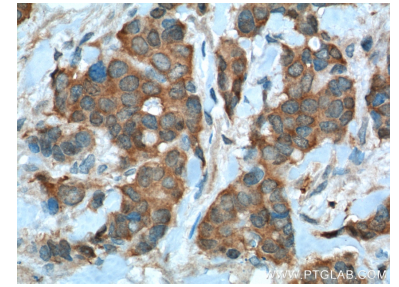
WB result of PRDX1 antibody (15816-1-AP; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PRDX1 transfected HEK-293 cells.



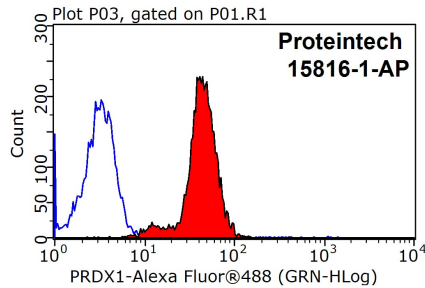
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using PRDX1 antibody (15816-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 15816-1-AP (PRDX1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 15816-1-AP (PRDX1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> HepG2 cells were stained with 0.2µg PRDX1 antibody (15816-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.