

For Research Use Only

# ATOX1 Polyclonal antibody

Catalog Number: 22641-1-AP

4 Publications



## Basic Information

<b>Catalog Number:</b> 22641-1-AP	<b>GenBank Accession Number:</b> BC112248	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 550 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 475	<b>Recommended Dilutions:</b> WB: 1:500-1:2000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O00244	<b>IHC:</b> 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> ATX1 antioxidant protein 1 homolog (yeast)	<b>IF/ICC:</b> 1:50-1:500
<b>Immunogen Catalog Number:</b> AG18460	<b>Calculated MW:</b> 68 aa, 8 kDa	
	<b>Observed MW:</b> 7 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IF	<b>WB :</b> A375 cells, A549 cells, HEK-293T cells, NCI-H1299 cells, HEK-293 cells
<b>Species Specificity:</b> human	<b>IHC :</b> human liver cancer tissue,
<b>Cited Species:</b> human, mouse	<b>IF/ICC :</b> PC-3 cells,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

Antioxidant 1 (ATOX1) is a copper chaperone to regulate copper homeostasis in cell. In the cytosol, ATOX1 always binds to copper and transfer to ATPase proteins in the trans-Golgi network, thereby promoting copper supply to various copper-dependent oxidoreductases matured within the secretory vesicles (PMID: 28294521). Also, the protein could protect cells against oxidative damage and the expression levels of ATOX1 may help to the inflammatory response and antioxidant defense, even to modulate response to the cancer (PMID: 27472369). ATOX1 plays an important role in the physiology of the human central nervous system, and it's highly expressed in the cerebral cortex and hippocampus (PMID: 30545441). Either cytosol or nucleus location of ATOX1 has been reported in different literatures, which may be associated with cell status (PMID: 24445997; 31317143).

## Notable Publications

Author	Pubmed ID	Journal	Application
Yajun Wang	40002764	Biomedicines	WB
Daxi Sun	39252079	J Nanobiotechnology	WB
Pengzhan Zhao	38640584	Redox Biol	WB, IF

## Storage

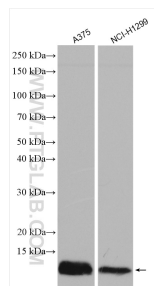
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

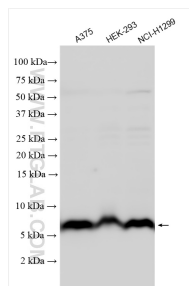
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

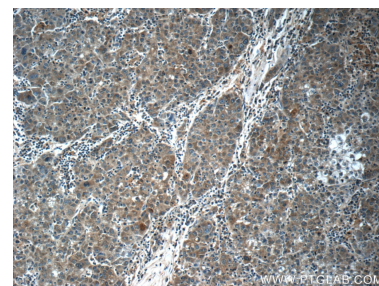
## Selected Validation Data



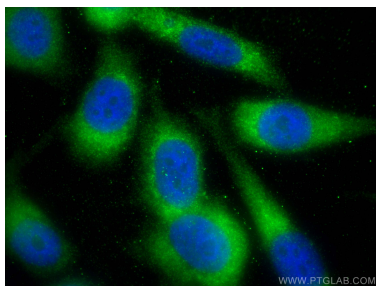
Various lysates were subjected to SDS PAGE followed by western blot with 22641-1-AP (ATOX1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 22641-1-AP (ATOX1 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 22641-1-AP (ATOX1 Antibody) at dilution of 1:50 (under 10x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed PC-3 cells using ATOX1 antibody (22641-1-AP) at dilution of 1:200 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).