

For Research Use Only

# ATOX1 Recombinant antibody

Catalog Number:83785-6-RR



## Basic Information

<b>Catalog Number:</b> 83785-6-RR	<b>GenBank Accession Number:</b> BC112248	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 475	<b>CloneNo.:</b> 240679E9
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O00244	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Isotype:</b> IgG	<b>Full Name:</b> ATX1 antioxidant protein 1 homolog (yeast)	
<b>Immunogen Catalog Number:</b> AG18460	<b>Calculated MW:</b> 68 aa, 8 kDa	
	<b>Observed MW:</b> 7 kDa	

## Applications

**Tested Applications:**  
WB, FC (Intra), ELISA

**Species Specificity:**  
human

### Positive Controls:

WB : A375 cells, A549 cells, HEK-293 cells, NCI-H1299 cells, HepG2 cells, Jurkat cells

## 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).

## Storage

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

**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

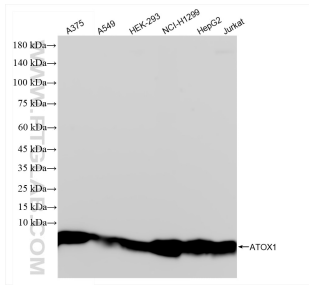
For technical support and original validation data for this product please contact:

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

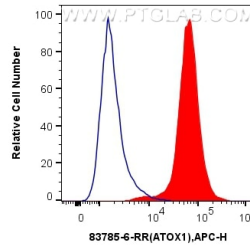
E: proteintech@ptglab.com  
W: ptglab.com

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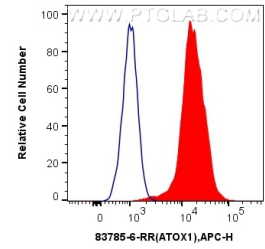
## Selected Validation Data



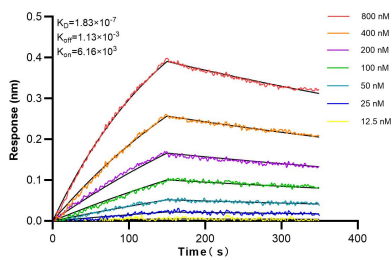
Various lysates were subjected to SDS PAGE followed by western blot with 83785-6-RR (ATOX1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



$1 \times 10^6$  PC-3 cells were intracellularly stained with 0.25  $\mu$ g ATOX1 Recombinant antibody (83785-6-RR, Clone:240679E9) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25  $\mu$ g Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25  $\mu$ g ATOX1 Recombinant antibody (83785-6-RR, Clone:240679E9) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25  $\mu$ g Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Bi-layer interferometry (BLI) kinetic assays of 83785-6-RR against Human ATOX1 were performed. The affinity constant is 183 nM.