10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ATOX1 Antibody (monoclonal) (M08)

Mouse monoclonal antibody raised against a partial recombinant ATOX1.
Catalog # AT1229a

Product Information

Application	WB, E
Primary Accession	O00244
Other Accession	NM_004045
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	4D6
Calculated MW	7402

Additional Information

Gene ID	475
Other Names	Copper transport protein ATOX1, Metal transport protein ATX1, ATOX1, HAH1
Target/Specificity	ATOX1 (NP_004036, 1 a.a. ~ 68 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	ATOX1 Antibody (monoclonal) (M08) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

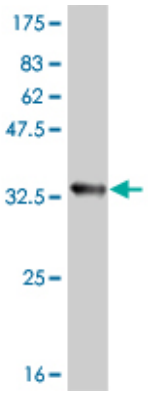
This gene encodes a copper chaperone that plays a role in copper homeostasis by binding and transporting cytosolic copper to ATPase proteins in the trans-Golgi network for later incorporation to the ceruloplasmin. This protein also functions as an antioxidant against superoxide and hydrogen peroxide, and therefore, may play a significant role in cancer carcinogenesis. Because of its cytogenetic location, this gene represents a candidate gene for 5q-syndrome.

References

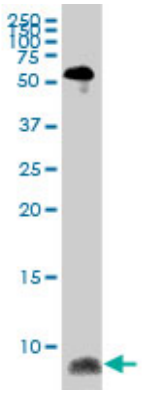
Copper(I)-mediated protein-protein interactions result from suboptimal interaction surfaces. Banci L, et al. Biochem J, 2009 Jul 29. PMID 19453293.Differential roles of Met10, Thr11, and Lys60 in structural dynamics

of human copper chaperone Atox1. Rodriguez-Granillo A, et al. Biochemistry, 2009 Feb 10. PMID 19146392.Conserved residues modulate copper release in human copper chaperone Atox1. Hussain F, et al. Proc Natl Acad Sci U S A, 2008 Aug 12. PMID 18685091.Metal binding domains 3 and 4 of the Wilson disease protein: solution structure and interaction with the copper(I) chaperone HAH1. Banci L, et al. Biochemistry, 2008 Jul 15. PMID 18558714.Analysis of the human Atox 1 homologue in Wilson patients. Simon I, et al. World J Gastroenterol, 2008 Apr 21. PMID 18416466.

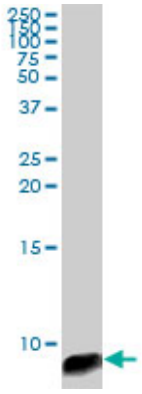
Images



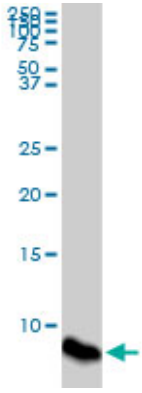
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (33.22 KDa) .



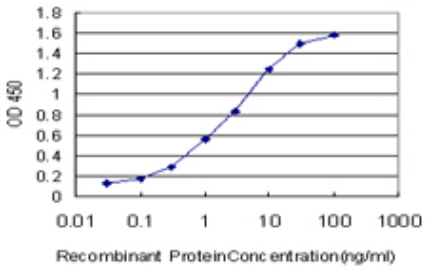
ATOX1 monoclonal antibody (M08), clone 4D6. Western Blot analysis of ATOX1 expression in human spleen.



ATOX1 monoclonal antibody (M08), clone 4D6. Western Blot analysis of ATOX1 expression in HepG2 ((Cat # AT1229a)



ATOX1 monoclonal antibody (M08), clone 4D6. Western Blot analysis of ATOX1 expression in COLO 320 HSR ((Cat # AT1229a)



Detection limit for recombinant GST tagged ATOX1 is approximately 0.03ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.