Mouse Copper-Transporting ATPase2 Monoclonal Antibody | anti-ATP7B antibody

Copper Transporting ATPase 2 Antibody: HRP

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103436	**Mouse**	**Human, Mouse, Rat**	**Immunoprecipitation, Western Blot, Immunohistochemistry**

PRODUCT SYNONYMS

Copper-Transporting ATPase2; Monoclonal Antibody; Copper Transporting ATPase 2 Antibody: HRP; ATP7B; ATPase Cu++ transporting beta polypeptide; ATPase Cu(2+) transporting beta polypeptide; Copper pump 2; Copper transporting ATPase 2; PWD; Toxic milk; tx; WC1; WD; Wilson disease associated protein; WND; WND/140 kDa; anti-ATP7B antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	IgG1
Clone Number	S62-29
Form/Format	Protein G Purified
Concentration	1mg/mL (varies by lot)
Sequence Length	1465
Applicable Applications for anti-ATP7B antibody	IP (Immunoprecipitation), WB (Western Blot), IHC (Immunohistochemistry)
Conjugate	HRP
Storage Buffer	PBS pH7.4, 50% glycerol, 0.09% sodium azide
Preparation and Storage	-20 degree C

IMAGES

WB (Western Blot)
Western Blot analysis of Rat Brain Membrane showing detection of ~160 kDa Copper Transporting ATPase 2 protein using Mouse Anti-Copper Transporting ATPase 2 Monoclonal Antibody, Clone S62-29 . Lane 1: Molecular Weight Ladder (MW). Lane 2: Rat Brain Membrane cell lysate. Load: 20 ug. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-Copper Transporting ATPase 2 Monoclonal Antibody at 1:1000 for 16 hours at 4 degree C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:100 for 60 min at RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~160 kDa.

ICC (Immunocytochemistry)
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Copper Transporting ATPase 2 Monoclonal Antibody, Clone S62-29 . Tissue: NIH 3T3 (Mouse Fibroblast cell line). Species: Mouse. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Copper Transporting ATPase 2 Monoclonal Antibody at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:200 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60 min at RT, 5 min at RT. Localization: Cytoplasm . Magnification: 60X.

ADDITIONAL INFORMATION

Related Product Information for anti-ATP7B antibody	**Background Info:** Detects ~160kDa in rat brain membrane preparations **Scientific Background:** The copper efflux transporters ATP7A and ATP7B sequester intracellular copper into the vesicular secretory pathway for export from the cell. ATP7b is an important protein for copper transport and elimination of excess copper from the body. ATP7b transports metals in and out of cells using ATP. There are 3 known isoforms of the ATP7b gene; A is found in the liver, kidney, and brain, the shorter form B is found in brain tissue, and the third isoform, known as WND/140 KDA is found in mitochondria. Mutations in the ATP7b gene can cause Wilson's disease, an inherited disorder causing copper poisoning in the brain and liver, characterized by neurological symptoms and hepatic damage.
Product Categories/Family for anti-ATP7B antibody	Transporters
References	1. Tanzi R.E., et al. (1993) Nature Genetics. 5: 344-350. 2. Ghr/nlm.gov/gene/ATP7B

NCBI AND UNIPROT INFORMATION

NCBI GI #	55743071
NCBI GeneID	540
NCBI Accession #	NP_000044.2
NCBI GenBank Nucleotide #	NM_000053.3
UniProt Accession #	B7ZLR4; P35670
Molecular Weight	151,875 Da
NCBI Official Full Name	copper-transporting ATPase 2 isoform a
NCBI Official Synonym Full Names	ATPase, Cu++ transporting, beta polypeptide
NCBI Official Symbol	ATP7B
NCBI Official Synonym Symbols	WD; PWD; WC1; WND
NCBI Protein Information	copper-transporting ATPase 2; copper pump 2; Wilson disease-associated protein; ATPase, Cu(2+)- transporting, beta polypeptide
UniProt Protein Name	ATP7B protein
UniProt Gene Name	**ATP7B**
UniProt Entry Name	B7ZLR4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/monoclonal/copper-transporting-atpase2-antibody-clone-s62-29-immunoprecipitation-western-blot-immunohistochemistry-elisa/103436