Recombinant Human ATP7B

Cat. No. ATP7B-174H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Wilson Protein (ATP7B, Copper-transporting ATPase 2, Copper pump 2, Wilson disease-associated protein) was cloned from human cDNA with a N-terminal purification tag and expressed in*E.coli*. The protein consists of the all six soluble domains of the human Wilson protein (residues 1-636 swissprot accession P35670) and contains 3 additional aa (SFT) in the apoform. N-term end of the protein. MW = 67.8 KDa.
Species	Human
Source	E.coli
ProteinLength	1-636 a.a.
Description	Wilson disease protein (also called ATP7B) is an ATPase that transports copper.This gene is a member of the P-type cation transport ATPase family and encodes a protein with several membrane-spanning domains, an ATPase consensus sequence, a hinge domain, a phosphorylation site, and at least two putative copper-binding sites. This protein functions as a monomer, exporting copper out of the cells, such as the efflux of hepatic copper into the bile.
Purity	>90% by SDS-PAGE. The protein was observed as a single band migrating at molecular weight of 66 kDa.
Supplied As	1mg/ml in sodium phosphate buffer 50mM pH=7.0 , arginine 50mM, glutammic acid 50mM, DTT 2mM, EDTA 1mM, pefabloc® 50uM. The concentration is calculated from t

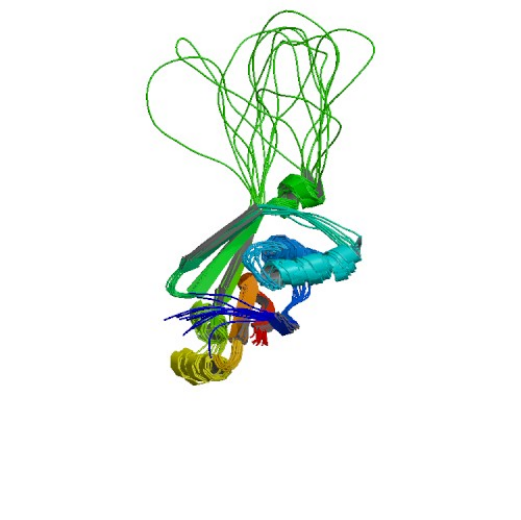
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	he absorbance at 280nm (ε280= 24410 $M^{-1}cm^{-1}$).
Characteriatias	To avoid precipitation handle the protein in an inert atmosphere, the product can be concentrated to a maximum of 0.3mM.
Usage	metal binding studies, kinetics, WB, SDS-page, blotting, ELISA, antibody production.
Storage	-20ºC. The protein is stable at 25ºC for at least several hours. After initial defrost, aliquot product into individual tubes and refreeze at -20ºC. Avoid repeated freeze/defrost cycles.

GENE INFORMATION

Gene Name	ATP7B ATPase, Cu++ transporting, beta polypeptide [Homo sapiens]
Synonyms	ATP7B; ATPase,Cu++ transporting, beta polypeptide; WD; PWD; WC1; WND; ATP7B; ATPase, Cu++ transporting, beta polypeptide (Wilson disease); Wilson disease;Copper-transporting ATPase 2;EC3.6.3.4; Copper pump 2; Wilson; disease-associated protein; wn/140KDa; OTTHUMP00000040880; ATPase, Cu(2+)-transporting, beta polypeptide; ATPase, Cu++ transporting, beta polypeptide (Wilson disease); Wilson disease-associated protein
Gene ID	540
mRNA Refseq	NM_000053
Protein Refseq	NP_000044
MIM	606882
UniProt ID	P35670

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Chromosome Location	13q14.3
Function	ATP binding;copper ion binding;copper-exporting ATPase activity;copper-exporting ATPase activity;hydrolase activity;hydrolase activity, acting on acid anhydrides, catalyzing transmembrane;movement of substances;magnesium ion binding;metal ion transmembrane transporter activity;nucleotide binding;protein binding
PDBrendering based on 2arf.	

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