

Recombinant Human ATOX1 (Yeast) (Lyophilized)

Cat. No. ATOX1-451H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human full length HAH1 (Copper transport protein ATOX1, Metal transport protein ATX1) cloned from human cDNA with a C-terminal purification tag was expressed in <i>E.coli</i> . The protein consists of the human HAH1 (residues 1-68, swissprot O00244). The C-terminal tag is cleaved during purification. MW = 7.8 kDa.
Species	Human
Source	E.coli
ProteinLength	1-68 a.a.
Description	Copper transport protein ATOX1 is a protein that in humans is encoded by the ATOX1 gene. 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. In melanocytic cells ATOX1 gene expression may be regulated by MITF.
Purity	> 95% by SDS-PAGE. The protein was observed as a single band migrating at amolecular weight of (<10 kDa).
Supplied As	Lyophilized from a 1mg/ml solution containing 1mM DTT (1ml). The concentration is calculated from the absorbance at 280nm ($\epsilon_{280} = 2680 \text{ M}^{-1} \text{ cm}^{-1}$).

 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

Characteristics	Under the above described conditions, to avoid precipitation or protein dimerization, the product can be concentrated to a maximum of 1mM. In case of precipitation, the precipitate can be partially redissolved using buffer solution with high conc. of DTT (20mM or more).
Storage	-20°C. The protein is stable at 4°C for at least 2 weeks and at 25°C for at least several hours. After initial defrost, aliquot product into individual tubes and refreeze at -20°C. Avoid repeated freeze/defrost cycles.
Full Length	Full L.
GENE INFORMATION	
Gene Name	ATOX1 ATX1 antioxidant protein 1 homolog (yeast) [Homo sapiens]
Synonyms	ATOX1; ATX1 antioxidant protein 1 homolog (yeast); ATX1; HAH1; MGC138453; MGC138455; antioxidant protein 1; metal transport protein; copper transport protein; ATX1 (antioxidant protein 1, yeast) homolog 1; Copper transport protein ATOX1; Metal transport protein ATX1
Gene ID	475
mRNA Refseq	NM_004045
Protein Refseq	NP_004036
MIM	2270
UniProt ID	O00244
Chromosome	5q32

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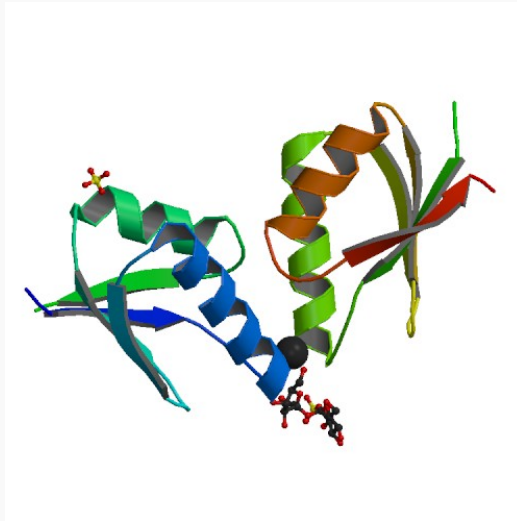
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Location**Function**

copper chaperone activity; copper-dependent protein binding; metal ion binding

PDB rendering based
on 1fe0.



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