Recombinant Full Length Human ATOX1 Protein, with Cu (I)

Cat. No. ATOX1-225H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length Human Cu (I)-ATOX1 (aa 1-68) was expressed in E. coli. Binding of Cu (I) to the protein was confirmed by ICP.
Species	Human
Source	E.coli
ProteinLength	aa 1-68
Description	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.
Form	In 20 mM Phosphate buffer pH 7.0.
Molecular Mass	7.4 kDa
AA Sequence	MPKHEFSVDM TCGGCAEAVS RVLNKLGGVK YDIDLPNKKV CIESEHSMDT LIATLKKTGK TVSYLGLE
Purity	>95% by SDS-PAGE. The protein was observed as a single band migrating at a molecular weight < 10 kDa.

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Notes	To avoid oxidation and leaking of the Cu(I) bound to the protein, keep and use the sample under inert atomosphere.
Storage	Store at - 20 centigrade. The protein is stable at 4 centigrade for at least 2 weeks and at 25 centigrade for at least several hours. After initial deforst, aliquot product into individual tubes under inert atomosphere and refreeze at - 20 centigrade. Avoid repeated freeze/defrost cycles. Avoid exposition to air.
Concentration	1 mg/ml

GENE INFORMATION

Gene Name	ATOX1 ATX1 antioxidant protein 1 homolog (yeast) [Homo sapiens]
Official Symbol	ATOX1
Synonyms	ATOX1; ATX1 antioxidant protein 1 homolog (yeast); ATX1 (antioxidant protein 1, yeast) homolog 1; copper transport protein ATOX1; HAH1; metal transport protein ATX1; ATX1; MGC138453; MGC138455;
Gene ID	475
mRNA Refseq	NM_004045
Protein Refseq	NP_004036
MIM	602270
UniProt ID	O00244
Chromosome	5q32

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Location	
Pathway	Mineral absorption, organism-specific biosystem; Mineral absorption, conserved biosystem;
Function	copper chaperone activity; copper ion binding; copper-dependent protein binding; metal ion binding; metallochaperone activity;

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