

Recombinant Human Cysteine Dioxygenase, Type I

Cat. No. CDO1-374H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant CDO1 protein was expressed in <i>E.coli</i> and purified by using conventional chromatography techniques. MW = 23.9 kDa (207aa).
Species	Human
Source	E.coli
Description	Cysteine dioxygenase(CDO1) is a mammalian non-heme iron enzyme that initiates several important metabolic pathways related to pyruvate and several sulfurate compounds including sulfate, hypotaurine and taurine. This protein catalyzes the conversion of L-cysteine to cysteine sulfinic acid (cysteine sulfinic acid) by incorporation of dioxygen. CDO1 is critical regulator of cellular cysteine concentrations and has an important role in maintaining the hepatic concentration of intracellular free cysteine within a proper narrow range.
Amino Acid Sequence	MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSHMEQ TEVLKPRTLA DLIRILHQLF AGDEVNVEEV QAIMEAYESD PTEWAMYAKF DQYRYTRNLV DQGNGKFNLM ILCWGEGHGS SIHDHTNSHC FLKMLQGNNK ETLFAWPDKK SNEMVKKSER VLRENQCAYI NDSVGLHRVE NISHTEPAVS LHLYSPPFDT CHAFDQR
Form	Liquid. In 20mM Tris buffer(pH 8.0) containing 10% glycerol, 1mM DTT.
Purity	> 90% by SDS – PAGE.

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Concentration	1 mg/ml (determined by Bradford assay).
Storage	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.
GENE INFORMATION	
Gene Name	CDO1 cysteine dioxygenase, type I [Homo sapiens]
Synonyms	CDO1; cysteine dioxygenase, type I; cysteine dioxygenase; EC 1.13.11.20;Cysteine dioxygenase type I; CDO-I; CDO
Gene ID	1036
mRNA Refseq	NM_001801
Protein Refseq	NP_001792
MIM	603943
UniProt ID	Q16878.
Chromosome Location	5q23.2
Pathway	Cysteine and methionine metabolism; Metabolic pathways; Taurine and hypotaurine metabolism
Function	cysteine dioxygenase activity; ferrous iron binding; metal ion binding; oxidoreductase activity