

# Recombinant Human Cysteine Dioxygenase, Type I

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

## SPECIFICATION

<b>Product Overview</b>	Recombinant CDO1 protein was expressed in <i>E.coli</i> and purified by using conventional chromatography techniques. MW = 23.9 kDa (207aa).
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	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 sulfinate) 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.
<b>Amino Acid Sequence</b>	MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSMEQ TEVLKPRTLA DLIRILHQLF AGDEVNVEEV QAIMEAYESD PTEWAMYAKF DQYRYTRNLV DQGNGKFNLM ILCWGEGHGS SIHDHTNSHC FLKMLQGNLK ETLFAWPKK SNEMVKKSER VLRENQCAYI NDSVGLHRVE NISHTEPAVS LHLYSPPFDT CHAFDQR
<b>Form</b>	Liquid. In 20mM Tris buffer(pH 8.0) containing 10% glycerol, 1mM DTT.
<b>Purity</b>	> 90% by SDS – PAGE.

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA