Cysteine Dioxygenase Type 1 (CDO1) ELISA Kit for Human

PRODUCT OVERVIEW

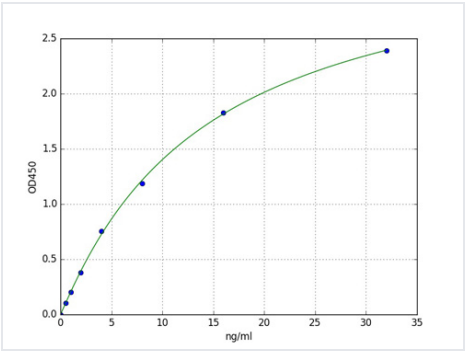
Product Name	Cysteine dioxygenase type 1 (CDO1), ELISA Kit
Full Product Name	Human Cysteine dioxygenase type 1 ELISA Kit
Product Gene Name	CDO1 elisa kit
Product Synonym Names	CDO1 (Cysteine dioxygenase type 1)/CDO/CDO-I
Species Reactivity	Human
Assay Type	Sandwich ELISA, Double Antibody
Samples	Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples
Detection Range	0.5-32ng/ml
Sensitivity	0.191ng/ml
Preparation and Storage	Store entire kit at 2-8C for short-term. For longer-term, please store the microplate & standard at -20C, while the remaining reagents can be stored at 2-8C
Molecular Weight	22,972 Da
OMIM	603943
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for CDO1 elisa kit	Principle of the Assay||This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-CDO1 antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-CDO1 antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and wash with wash buffer. HRP-Streptavidin was added and unbound conjugates were washed away with wash buffer. TMB substrates were used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the CDO1 amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of CDO1 can be calculated.
Other Notes	Small volumes of CDO1 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CDO1 purchase	MBS761135 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Cysteine dioxygenase type 1 (CDO1) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing CDO1. The ELISA analytical biochemical technique of the MBS761135 kit is based on CDO1 antibody-CDO1 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CDO1 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CDO1. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).

Typical Data & Standard Curve

Results of a typical standard run of a CDO1 ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A=not applicable)

X	ng/ml	0	0.5	1	2	4	8	16	32
Y	OD450	0.008	0.118	0.227	0.439	0.819	1.417	1.858	2.278

Typical Testing Data of CDO1 elisa kit



Typical Standard Curve of CDO1 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CDO1. It may not necessarily be applicable to this product.

NCBI GI #	56786147
NCBI GeneID	1036
NCBI Accession #	NP_001792.2
UniProt Secondary Accession #	P78513; Q6FHZ8; Q8TB64; B2RAK4
UniProt Related Accession #	Q16878
GenBank Nucleotide #	NM_001801.2
NCBI Official Full Name	cysteine dioxygenase type 1
NCBI Official Synonym Full Names	cysteine dioxygenase type 1
NCBI Official Symbol	CDO1
UniProt Protein Name	Cysteine dioxygenase type 1
UniProt Synonym Protein Names	Cysteine dioxygenase type I; CDO; CDO-I
Protein Family	Cysteine dioxygenase
UniProt Gene Name	CDO1
UniProt Synonym Gene Names	CDO; CDO-I
UniProt Entry Name	CDO1_HUMAN
NCBI Protein Information	cysteine dioxygenase type 1

UniProt Comments for CDO1	CDO1: Initiates several important metabolic pathways related to pyruvate and several sulfurate compounds including sulfate, hypotaurine and taurine. Critical regulator of cellular cysteine concentrations. Has an important role in maintaining the hepatic concentation of intracellular free cysteine within a proper narrow range. Belongs to the cysteine dioxygenase family. Protein type: Amino Acid Metabolism - cysteine and methionine; EC 1.13.11.20; Oxidoreductase; Other Amino Acids Metabolism - taurine and hypotaurine Chromosomal Location of Human Ortholog: 5q23.2 Cellular Component: cytosol Molecular Function: cysteine dioxygenase activity; ferrous iron binding Biological Process: cysteine metabolic process; inflammatory response; L-cysteine catabolic process; lactation; response to amino acid stimulus; response to cAMP; response to ethanol; response to glucagon stimulus; response to glucocorticoid stimulus; sulfur amino acid biosynthetic process; sulfur amino acid catabolic process; sulfur amino acid metabolic process; taurine biosynthetic process
Research Articles on CDO1	**1.** Decreased expression of CDO1 is associated with esophageal squamous cell carcinoma.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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