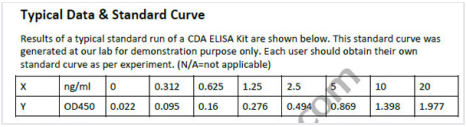
Cytidine Deaminase (CDA) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Cytidine deaminase (CDA), ELISA Kit
Full Product Name	Human Cytidine deaminase ELISA Kit
Product Gene Name	CDA elisa kit
Product Synonym Names	CDA/Cytidine aminohydrolase/CDD
Species Reactivity	Human
Assay Type	Sandwich ELISA, Double Antibody
Samples	Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples
Detection Range	0.313-20ng/ml
Sensitivity	0.188ng/ml
Specificity	This assay has high sensitivity and excellent specificity for detection of CDA. No significant cross-reactivity or interference between CDA and analogues was observed.
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
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level CDAwere tested on 3 different plates, 8 replicates in each plate. CV (%) = SD/meanX100. Inter-Assay: CV<10%
Intra-assay Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level CDAwere tested 20 times on one plate, respectively. Intra-Assay: CV<8%
Molecular Weight	16,185 Da
OMIM	123920
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for CDA elisa kit	Principle of the Assay: This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-CDAantibody was pre-coated onto 96-well plates. And the biotin conjugated anti- CDA 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 CDA amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of CDA can be calculated.
Other Notes	Small volumes of CDA 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 CDA purchase	MBS765621 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Cytidine deaminase (CDA) 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 CDA. The ELISA analytical biochemical technique of the MBS765621 kit is based on CDA antibody-CDA antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CDA antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CDA. 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 CDA 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	0.312	0.625	1.25	2.5	5	10	20
Y	OD450	0.022	0.095	0.16	0.276	0.494	0.869	1.398	1.977

Typical Testing Data/Standard Curve (for reference only) of CDA elisa kit

ADDITIONAL DETAILS

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

NCBI GI #	11386157
NCBI GeneID	978
NCBI Accession #	NP_001776.1
UniProt Related Accession #	P32320
GenBank Nucleotide #	NM_001785.2
NCBI Official Full Name	cytidine deaminase
NCBI Official Synonym Full Names	cytidine deaminase
NCBI Official Symbol	CDA
NCBI Official Synonym Symbols	CDD
UniProt Protein Name	Cytidine deaminase
UniProt Synonym Protein Names	Cytidine aminohydrolase
Protein Family	Calcium-transporting ATPase
UniProt Gene Name	CDA
UniProt Synonym Gene Names	CDD
UniProt Entry Name	CDD_HUMAN
NCBI Protein Information	cytidine deaminase
NCBI Summary for CDA	This gene encodes an enzyme involved in pyrimidine salvaging. The encoded protein forms a homotetramer that catalyzes the irreversible hydrolytic deamination of cytidine and deoxycytidine to uridine and deoxyuridine, respectively. It is one of several deaminases responsible for maintaining the cellular pyrimidine pool. Mutations in this gene are associated with decreased sensitivity to the cytosine nucleoside analogue cytosine arabinoside used in the treatment of certain childhood leukemias. [provided by RefSeq, Jul 2008]
UniProt Comments for CDA	CDA: This enzyme scavenge exogenous and endogenous cytidine and 2'-deoxycytidine for UMP synthesis. Belongs to the cytidine and deoxycytidylate deaminase family. Protein type: Nucleotide Metabolism - pyrimidine; Hydrolase; EC 3.5.4.5; Xenobiotic Metabolism - drug metabolism - other enzymes Chromosomal Location of Human Ortholog: 1p36.2-p35 Cellular Component: cytosol; extracellular region Molecular Function: cytidine deaminase activity; nucleoside binding; protein binding; protein homodimerization activity; zinc ion binding Biological Process: cell surface receptor linked signal transduction; cytidine deamination; cytosine metabolic process; negative regulation of cell growth; negative regulation of nucleotide metabolic process; nucleobase, nucleoside and nucleotide metabolic process; protein homotetramerization; pyrimidine base metabolic process; pyrimidine nucleoside salvage; pyrimidine salvage

Research Articles on CDA	**1.** miR-484-modulated cytidine deaminase has a dual impact in promoting chemoresistance and suppressing cell proliferation in breast cancer
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