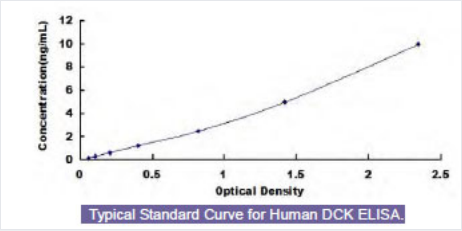
Deoxycytidine Kinase (DCK) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Deoxycytidine Kinase (DCK), ELISA Kit
Full Product Name	Human Deoxycytidine Kinase (DCK) ELISA Kit
Product Gene Name	DCK elisa kit
Species Reactivity	Human
Assay Type	Sandwich
Samples	Tissue homogenates and other biological fluids.
Detection Range	0.156-10ng/mL
Sensitivity	0.059ng/mL
Specificity	This assay has high sensitivity and excellent specificity for detection of DCK. No significant cross-reactivity or interference between DCK and analogues was observed.
Preparation and Storage	For unopened kit, all reagents should be kept according to the labels on vials. The TMB Substrate, Wash Buffer, Stop Solution should be stored at 4 degree C. All others should be stored at -20 degree C.
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level DCK were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. Inter-Assay: CV<12%
Intra-assay Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level DCK were tested 20 times on one plate, respectively. Intra-Assay: CV<10%
Molecular Weight	30,519 Da
OMIM	M60527 mRNA
3D Structure	ModBase 3D Structure for P27707
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for DCK elisa kit	Intended Uses: The kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of DCK in human tissue homogenates and other biological fluids. Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to DCK. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific to DCK. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain DCK, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm +/- 10nm. The concentration of DCK in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of DCK 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 DCK purchase	MBS453389 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Deoxycytidine Kinase (DCK) 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 DCK. The ELISA analytical biochemical technique of the MBS453389 kit is based on DCK antibody-DCK antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect DCK antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, DCK. 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 Testing Data/Standard Curve (for reference only) of DCK elisa kit

ADDITIONAL DETAILS

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

NCBI GI #	4503269
NCBI GeneID	1633
NCBI Accession #	NP_000779.1
UniProt Primary Accession #	P27707
UniProt Secondary Accession #	Q5TZY7; Q6FI11; B2R8V6
UniProt Related Accession #	P27707
GenBank Nucleotide #	NM_000788.2
NCBI Official Full Name	deoxycytidine kinase
NCBI Official Synonym Full Names	deoxycytidine kinase
NCBI Official Symbol	DCK
UniProt Protein Name	Deoxycytidine kinase
Protein Family	Deoxyadenosine/deoxycytidine kinase
UniProt Gene Name	DCK
UniProt Synonym Gene Names	dCK
NCBI Protein Information	deoxycytidine kinase
NCBI Summary for DCK	Deoxycytidine kinase (DCK) is required for the phosphorylation of several deoxyribonucleosides and their nucleoside analogs. Deficiency of DCK is associated with resistance to antiviral and anticancer chemotherapeutic agents. Conversely, increased deoxycytidine kinase activity is associated with increased activation of these compounds to cytotoxic nucleoside triphosphate derivatives. DCK is clinically important because of its relationship to drug resistance and sensitivity. [provided by RefSeq, Jul 2008]
UniProt Comments for DCK	Required for the phosphorylation of the deoxyribonucleosides deoxycytidine (dC), deoxyguanosine (dG) and deoxyadenosine (dA). Has broad substrate specificity, and does not display selectivity based on the chirality of the substrate. It is also an essential enzyme for the phosphorylation of numerous nucleoside analogs widely employed as antiviral and chemotherapeutic agents.
Research Articles on DCK	**1.** Low deoxycytidine kinase expression is associated with periampullary adenocarcinoma.
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