

Recombinant Human Deoxycytidine Kinase, His-tagged

Cat. No. DCK-795H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human DCK protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography. MW = 34.6 kDa(296aa), confirmed by MALDI-TOF.
Species	Human
Source	E.coli
Description	DCK is a key enzyme in the salvage of deoxyribonucleosides and in the activation of clinically relevant nucleoside analogues. This protein is responsible for the 5'-phosphorylation of purine and pyrimidine deoxynucleosides to the corresponding monophosphates using ATP or UTP as phosphate donors. Deficiency of this enzyme activity is associated with resistance to antiviral and anticancer chemotherapeutic agents, whereas increased enzyme activity is associated with increased activation of these compounds to cytotoxic nucleoside triphosphate derivatives.
Sequences Of Amino Acids	MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSMATP PKRSCPSFSA SSEGTRIKKI SIEGNIAAGK STFVNILKQL CEDWEVVPEP VARWCNVQST QDEFEELTMS QKNGGNVLQM MYEKPERWSF TFQTYACLSR IRAQLASLNG KLKDAEKPVL FFERSVYSR YIFASNLYES ECMNETEWTI YQDWHDMN QFGQSLELDG IYQLQATPET CLHRIYLRGR NEEQGIPLEY LEKLHYKHES WLLHRTLKTN FDYLQEVPII TLDVNEDFKD KYESLVEKVK EFLSTL
Purity	> 90% by SDS – PAGE.

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Form	Liquid. In 20 mM Tris-HCl Buffer (pH 7.5) containing 1 mM DTT, 0.1 mM PMSF, 2mM EDTA, 10% Glycerol.
Concentration	0.5 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	DCK deoxycytidine kinase [Homo sapiens]
Synonyms	DCK; deoxycytidine kinase; MGC117410; MGC138632; OTTHUMP00000219118; OTTHUMP00000219119; EC 2.7.1.74
Gene ID	1633
mRNA Refseq	NM_000788
Protein Refseq	NP_000779
MIM	125450
UniProt ID	P27707
Chromosome Location	4q13.3-q21.1
Pathway	Purine metabolism; Pyrimidine metabolism
Function	ATP binding; deoxycytidine kinase activity; kinase activity; nucleotide binding;

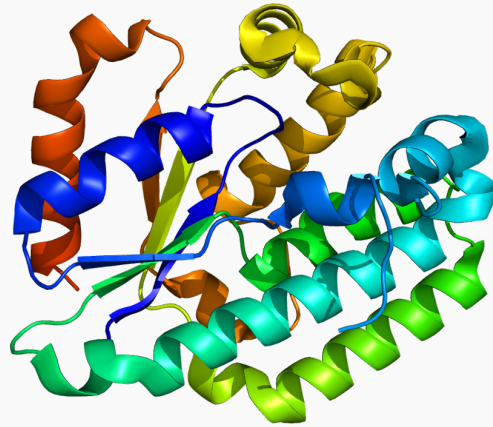
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phosphotransferase activity, alcohol group as acceptor; transferase activity

PDB rendering based
on 1p5z.



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