

AR09676PU-L**Human Deoxycytidine kinase (1-260, His-tag) - Purified****Alternate names:**

DCK, MGC117410, MGC138632

Quantity:

0.5 mg

Concentration:

0.5 mg/ml (determined by Bradford assay)

Background:

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.

Uniprot ID:[P27707](#)**NCBI:**[NP_000779](#)**GeneID:**[1633](#)**Species:**

Human

Source:

E. coli

Format:**State:** Liquid purified protein**Purity:** >90%**Buffer System:** 20 mM Tris-HCl Buffer (pH 7.5) containing 1 mM DTT, 0.1 mM PMSF, 2mM EDTA, 10% Glycerol**Description:**

Recombinant human DCK protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MADPWQECMD YAVTLARQAG EVVCEAIKNE MNVMLKSSPV
DLVTATDQKV EKMLISSIKE KYPHSFIGE ESVAAGEKSI LTDNPTWIID PIDGTTNFVH
RFPFVAVSIG FAVNKKIEFG VVYSCVEGKM YTARKGKGAF CNGQKLQVSQ QEDITKSLLV
TELGSSRTPE TVRMVLSNME KLFCIPVHGI RSVGTAAVNM CLVATGGADA YYEMGIHCWD
VAGAGIIVTE AGGVLMDVTG GPFDLMSRRV IAANNRILAE RIAKEIQVIP LQRDDED

Molecular weight: 34.6 kDa (296aa), confirmed by MALDI-TOF**Storage:**

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

Radu CG., et al. (2010) Proc Natl Acad Sci U S A. 107(12):5551-6.

Ribeiro R., et al. (2007) J Pharmacol Exp Ther. 323(3):935-45.

Pictures:

Recombinant human DCK (1-260), His-tagged

