

DCK, 1-260aa, Human, His tag, E.coli

Cat.NO.: TP01836

3th Edition

Synonyms:Deoxycytidine kinase,dCK

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.

Form:Liquid. In 20 mM Tris-HCl Buffer (pH 7.5) containing 1 mM DTT,0.1 mM PMSF, 2mM EDTA, 10% Glycerol

Molecular Weight:34.6 kDa(296aa), confirmed by MALDI-TOF

Sequences:

MRGSHHHHHHGMASMTGGQQMGRDLYDDDDKDRWGSMATPPKRSCPSFSASSEGTRIKKISIEGNIAAGKSTFV
NILKQLCEDWEVVPEPVARWCNVQSTQDEFEEELTMSQKNGGNVLQMMYEKPERWSFTFQTYACLSRIRAQLASL
NGKLDKDAEKPVLFERSVYSDRYIFASNLYESECMNETEWTIYQDWHDMNMQFGQSLELDGIIYLQATPETCLHR
IYLRGRNEEQGIPLEYLEKLHYKHESWLLHRTLKTNFDYLQEVPIITLDVNEDFKDKYESLVEKVKEFLSTL

Purity:> 95% by HPLC

Concentration:0.5 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

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.