

32-6952: ADK Mouse

Application : Functional Assay

Alternative Name : AK, ADK, Adenosine Kinase, Adenosine 5-Phosphotransferase.

Description

Source: Escherichia Coli.

Sterile Filtered clear solution.

Adenosine Kinase is an abundant enzyme in mammalian tissues which catalyzes the transfer of the gamma-phosphate from ATP to adenosine, thus is as a regulator of concentrations of both extracellular adenosine and intracellular adenine nucleotides. Adenosine has extensive effects on the cardiovascular, nervous, respiratory, and immune systems and inhibitors of the enzyme take a crucial pharmacological part in growing intravascular adenosine concentrations and acting as anti-inflammatory agents.

ADK produced in E.Coli is a single, non-glycosylated polypeptide chain containing 384 amino acids (1-361a.a.) and having a molecular mass of 42.5kDa. ADK is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 95.0% as determined by SDS-PAGE.

Content : The ADK protein solution (1mg/ml) contains 20% glycerol, 20mM Tris-HCl buffer (pH8.0), 1mM EDTA & 50mM NaCl.

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Amino Acid : MGSSHHHHHH SSGLVPRGSH MGSMAAADEP KPKKLKVEAP QALSENVLFG MGNPLLDISA
VVDKDFLDKY SLKPNDQILA EDKHKELFDE LVKKFKVEYH AGGSTQNSMK VAQWLIQEPH KAATFFGCIG
IDKFGEILKR KAADAHVDAH YYEQNEQPTG TCAACITGGN RSLVANLAAA NCYKKEKHL D LERNWVLVEK
ARVYYIAGFF LTVSPESVLK VARYAAENNR VFTLNLSAPF ISQFFKEALM DVMPYVDILF GNETEAATFA
REQGFETKDI KEIAKKAQAL PKVNSKRQRT VIFTQGRDDT IVAAENDVTA FVLDQNQEE IIDTNGAGDA
FVGGFSLQLV SDKPLTECIR AGHYAASVII RRTGCTFPEK PDFH.

Application Note

Specific activity is > 100 pmol/min/ and is defined as the amount of enzyme that convert 1.0 pmole of adenosine to AMP per minute at pH 7.5 at 37C in a couple system with PK and LDH. Å Å