

## 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 MGSMAADEP KPKKLKVEAP QALSENVLF 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 FVGGFLSQLV 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