Product information



Adk, 1-361aa

Mouse, His-tagged, Recombinant, E.coli

Cat. No. IBATGP3692

Full name: Adenosine kinase NCBI Accession No.: NP_598840

Synonyms: 2310026J05Rik, 5033405D03Rik, Al255373, Al987814, Ak

Description: Adk, also known as Adenosine kinase, is an abundant enzyme in mammalian tissues that catalyzes the transfer of the gamma-phosphate from ATP to adenosine, thereby serving as a regulator of concentrations of both extracellular adenosine and intracellular adenine nucleotides. Adenosine kinase has widespread effects on the cardiovascular, nervous, respiratory, and immune systems and inhibitors of the enzyme could play an important pharmacological role in increasing intravascular adenosine concentrations and acting as anti-inflammatory agents. Recombinant mouse Adk, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

Form: Liquid. In 20mM Tris-Hcl buffer (pH8.0) containing 20% glycerol

50mM NaCl, 1mM EDTA

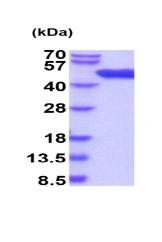
Molecular Weight: 42.5 kDa (384aa) confirmed by MALDI-TOF

Purity: > 95% by SDS-PAGE

Concentration: 1 mg/ml (determined by Absorbance at 280nm)

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

Biological activity: 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.



15% SDS-PAGE (3ug)

Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MGSMAAADEP KPKKLKVEAP QALSENVLFG MGNPLLDISA VVDKDFLDKY SLKPNDQILA EDKHKELFDE LVKKFKVEYH AGGSTQNSMK VAQWLIQEPH KAATFFGCIG IDKFGEILKR KAADAHVDAH YYEQNEQPTG TCAACITGGN RSLVANLAAA NCYKKEKHLD LERNWVLVEK ARVYYIAGFF LTVSPESVLK VARYAAENNR VFTLNLSAPF ISQFFKEALM DVMPYVDILF GNETEAATFA REQGFETKDI KEIAKKAQAL PKVNSKRQRT VIFTQGRDDT IVAAENDVTA FPVLDQNQEE IIDTNGAGDA FVGGFLSQLV SDKPLTECIR AGHYAASVII RRTGCTFPEK PDFH

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General references:

Chakraborty A., et al. (2002) J Biol Chem. 277(49: 47451-60.

Sakowicz M., et al. (2001) Acta Biochim Pol. 48(3):745-54.

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.

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