Product information

Adenylate kinase 2, 1- 239 aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBADK0901

Synonyms: AK2, ADK2

NCBI Accession No.: NP_001616

Description: Adenylate kinase (AK; adenosine triphosphate-adenosine monophosphate [ATP-AMP] phospho-transferase, EC 2.7.4.3) is a ubiquitous monomeric enzyme involved energy metabolism of prokaryotic and eukaryotic cells. Three isozymes (AK1, AK2 and AK3) are characterized in vertebrates. Expression of these isozymes is tissue-specific and developmentally regulated. AK2 is localized in the mitochondrial intermembrane space and may play a role in apoptosis. Recombinant human AK2 protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

Form: Liquid. In PBS (pH 7.4) containing 2 mM DTT, 20% glycerol

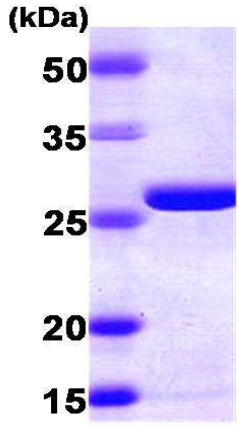
Molecular Weight: 28.6 kDa (259 aa), confirmed by MALDI-TOF

Purity: > 95% by SDS - PAGE

Concentration: 1 mg/ml (determined by Bradford assay)

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

Biological Activity: Specific activity is > 25 units/mg. One unit will convert 2.0 umoles of ADP to ATP + AMP per minute at pH 7.5 at 37C.



15% SDS-PAGE (3ug)

Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MAPSVPAAEP EYPKGIRAVL LGPPGAGKGT QAPRLAENFC VCHLATGDML RAMVASGSEL GKKLKATMDA GKLVSDEMVV ELIEKNLETP LCKNGFLLDG FPRTVRQAEM LDDLMEKRKE KLDSVIEFSI PDSLLIRRIT GRLIHPKSGR SYHEEFNPPK EPMKDDITGE PLIRRSDDNE KALKIRLQAY HTQTTPLIEY YRKRGIHSAI DASQTPDVVF ASILAAFSKA TCKDLVMFI

General references:

Kohler C., *et al.* (1999).*FEBS Lett.* **447**(1):10-2

Lee Y., *et al.* (1998).*J Biol Chem.* **123**(1):47-54

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.

Manufactured for:
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