

Recombinant human Adenylate kinase 2 protein

Catalog Number: ADK0901

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-239aa

UniProt No.

P54819

NCBI Accession No.

NP_001616.1

Alternative Names

Adenylate kinase 2, Mitochondrial Adenylate kinase 2, ATP-AMP transphosphorylase 2, ATP:AMP phosphotransferase, Adenylate monophosphate kinase, ADK2

PRODUCT SPECIFICATION

Molecular Weight

28.6 kDa (259aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 2mM DTT, 20% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

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

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

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.

Amino acid Sequence

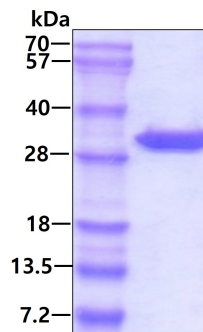
<MGSSHHHHHH SGLVPRGSH> MAPSVPA AEP EYPKGIRAVL LGPPGAGKGT QAPRLAENFC VCHLATGDML
RAMVASGSEL GKKLKATMDA GKLVSDEMVV ELIEKNLETP LCKNGFLLDG FPRTVRQAEM LDDLMEKRKE KLDSVIEFSI
PDSLLIRRI TGRLIHPKSGR SYHEEFNPPK EPMKDDITGE PLIRRSDDNE KALKIRLQAY HTQTTPLIEY YRKRGIHSAI
DASQTPDVVF ASILA AFKA TCKDLVMFI

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

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.