Recombinant mouse AK2 protein

Catalog Number: ATGP3701

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-239aa

UniProt No.
Q9WTP6

NCBI Accession No.
NP_001029138.1

Alternative Names
Adenylate kinase 2 mitochondrial isoform a, Ak-2, D4Ertd220e, ATP-AMP transphosphorylase 2, ATP:AMP phosphotransferase, Adenylate monophosphate kinase

PRODUCT SPECIFICATION

Molecular Weight
29.0 kDa (263aa) confirmed by MALDI-TOF

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.5) containing 10% glycerol, 1mM DTT

Purity
> 95% by SDS-PAGE

Biological Activity
Specific activity is > 40unit/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.

BACKGROUND

Description
Ak2, also known as Adenylate kinase 2 mitochondrial isoform a, is a ubiquitous monomeric enzyme involved energy metabolism of prokaryotic and eukaryotic cells. Three isozymes (Ak1, Ak2 and Ak3) are characterized in

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vertebrates. Expression of these isozymes is tissue-specific and developmentally regulated. Ak2 is localized in the mitochondrial intermembrane space and may pay a role in apoptosis. Recombinant mouse Ak2 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

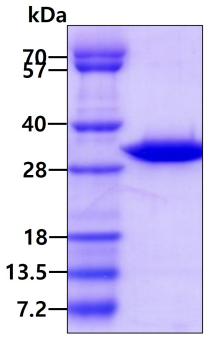
<MGSSHHHHHH SSGLVPRGSH MGSH>MAPNVL ASEPEIPKGI RAVLLGPPGA GKGTQAPKLA ENFCVCHLAT GDMLRAMVAS GSELGKKLKA TMDAGKLVSD EMVVELIEKN LETPSCKNGF LLDGFPRTVR QAEMLDDLME KRKEKLDSVI EFSIQDSLLI RRITGRLIHP KSGRSYHEEF NPPKEPMKDD ITGEPLIRRS DDNEKALKTR LEAYHTQTTP LVEYYRKRGI HCAIDASQTP DIVFASILAA FSKATCKDLV MFI

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



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