

Recombinant Human Adenylate Kinase 1, His-tagged

Cat. No. AK1-2864H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human AK1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography. MW = 23.7 kDa (214aa) confirmed by MALDI-TOF.
Species	Human
Source	E.coli
Description	AK1 is an enzyme involved in regulating the adenine nucleotide composition within a cell by catalyzing the reversible transfer of the terminal phosphate group between ATP and AMP. This protein is found in the cytosol of skeletal muscle, brain and erythrocytes. It is a small ubiquitous enzyme which is essential for maintenance and cell growth. Defects in AK1 are the cause of a form of hemolytic anemia.
Sequences Of Amino Acids	MGSSHHHHH SSGLVPRGSH MEEKLKTKI IFVVGPGSG KGTQCEKIVQ KYG YTHLSTG DLLRSEVSSG SARGKKLSEI MEKGQLVPLE TVLDMLRDAM VAKVNTSKGF LIDGYPREVQ QGEEFERRIG QPTLLLYVDA GPETMTQRLL KRGETSGRVD DNEETIKKRL ETYYKATEPV IAFYEKRGIV RKNVAEGSVD SVFSQVCTHL DALK
Purity	> 95% by SDS – PAGE.
Form	Liquid. In 20 mM Tris-HCl Buffer (pH 7.5) containing 10% Glycerol.
Concentration	1mg/ml (determined by Bradford assay).

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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.

GENE INFORMATION
Gene Name

AK1 adenylate kinase 1 [Homo sapiens]

Synonyms

AK1; adenylate kinase 1; adenylate kinase isoenzyme 1; myokinase;
OTTHUMP00000022220; OTTHUMP00000216413; ATP-AMP transphosphorylase 1;
EC 2.7.4.3; AK 1

Gene ID

203

mRNA Refseq

NM_000476

Protein Refseq

NP_000467

MIM

103000

UniProt ID

P00568

**Chromosome
Location**

9q34.1

Pathway

Metabolic pathways; Purine metabolism

Function

ATP binding; adenylate kinase activity; nucleobase, nucleoside, nucleotide kinase
activity; nucleotide binding; protein binding; transferase activity

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA