

## Human Recombinant AK1

<b>CATALOG #:</b>	6385-100	100 µg
<b>ALTERNATE NAMES:</b>	Adenylate kinase isoenzyme1, ATP-AMP transphosphorylase 1, Myokinase.	
<b>SOURCE:</b>	E.Coli	
<b>PURITY:</b>	> 95% by SDS - PAGE	
<b>MOL. WEIGHT:</b>	23.7 kDa (214 aa, 1-194 aa + NT His Tag)	
<b>FORMULATION:</b>	1 mg/ml solution in 20 mM Tris-HCl buffer (pH 7.5) containing 10% glycerol.	

### STORAGE CONDITIONS:

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.

### DESCRIPTION:

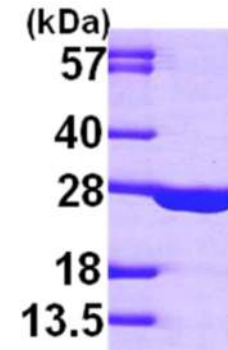
AK1 is an enzyme involved in regulating the adenine nucleotide composition within a cell by catalyzing the reversible transfer of the terminal phosphate group between ATP and AMP. This protein is found in the cytosol of skeletal muscle, brain and erythrocytes. It is a small ubiquitous enzyme which is essential for maintenance and cell growth. Defects in AK1 are the cause of a form of hemolytic anemia. Recombinant human AK1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.

### AMINO ACID SEQUENCE:

MGSSHHHHHH SGLVPRGSH MEEKLKKTKI IFVVGPGSG KGTQCEKIVQ  
KYGTYHLSTG DLLRSEVSSG SARGKKLSEI MEKGRQLVPLE TVLDMLRDAM VAKVNTSKGF  
LIDGYPREVQ QGEEFERRIG QPTLLLYVDA GPETMTQRLR KRGETSGRVD DNEETIKKRL  
ETYYKATEPV IAFYEKRGIV RKNVAEGSVD SVFSQVCTHL DALK

### BIOLOGICAL ACTIVITY:

Specific activity: > 6.0 units/ml. One unit will convert 2.0 µmoles of ADP to ATP + AMP per minute at pH 7.5 at 25C.



15% SDS-PAGE (3µg)

Human Recombinant AK1

### RELATED PRODUCTS:

- Human Recombinant AK2 (Cat. No. 6386-100)

**FOR RESEARCH USE ONLY! Not to be used in humans.**