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## 32-2936: AK1 Recombinant Protein

Alternative Name: Adenylate kinase isoenzyme 1,AK 1,ATP-AMP transphosphorylase 1,Myokinase,AK1.

## **Description**

Source: Escherichia Coli. AK1 Human Recombinant fused with a 20 amino acid His tag at N-terminus produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 214 amino acids (1-194 a.a.) and having a molecular mass of 23.7kDa. The AK1 is purified by proprietary chromatographic techniques. AK1 is a small ubiquitous enzyme which is essential for maintenance and cell growth. It is involved in the regulation of adenine nucleotide composition within a cell by catalyzing the reversible transfer of the terminal phosphate group between ATP and AMP. The AK1 protein is found in the cytosol of skeletal muscle, brain and erythrocytes. Defects in the AK1 gene are the cause of a form of hemolytic anemia.

## **Product Info**

Amount:  $25 \mu g$ 

**Purification:** Greater than 95.0% as determined by SDS-PAGE.

Content: The AK1 protein solution (1mg/ml) contains 20mM Tris-HCl pH-8 and 10% glycerol.

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods

**Storage condition :** of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or

BSA). Avoid multiple freeze-thaw cycles.

Amino Acid: MGSSHHHHHH SSGLVPRGSH MEEKLKKTKI IFVVGGPGSG KGTQCEKIVQ KYGYTHLSTG DLLRSEVSSG

SARGKKLSEI MEKGQLVPLE TVLDMLRDAM VAKVNTSKGF LIDGYPREVQ QGEEFERRIG QPTLLLYVDA GPETMTQRLL KRGETSGRVD DNEETIKKRL ETYYKATEPV IAFYEKRGIV RKVNAEGSVD SVFSQVCTHL

DALK.

## **Application Note**

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

