

Datasheet for ABIN7529381

**Adenylate Kinase 1 Protein (AK1) (AA 1-210) (His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	100 µg
Target:	Adenylate Kinase 1 (AK1)
Protein Characteristics:	AA 1-210
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Adenylate Kinase 1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS)

## Product Details

Sequence:	MGSSHHHHHH SSGLVPRGSH MGSMGCCVSS EPQEEGGRKT GEKLKKAKII FVVGPGSGK GTQCEKIVQK YGYTHLSTGD LLRAEVSSGS ERGKKLSAIM EKGLVPLDT VLDMLRDAML AKVDSSNGFL IDGYPREVKQ GEEFEQKIGQ PTLLLYVDAG AETMTQRLK RGETSGRVDD NEETIKKRLE TYYNATEPVI SFYDKRGIVR KVNAEGTVDT VFSEVCTYLD SLK
Purity:	> 90 % by SDS - PAGE
Biological Activity Comment:	Specific activity is > 150 units/mg. One unit will convert 2.0 umoles of ADP to ATP + AMP per minute at pH 7.5 at 37C.

## Target Details

Target:	Adenylate Kinase 1 (AK1)
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## Target Details

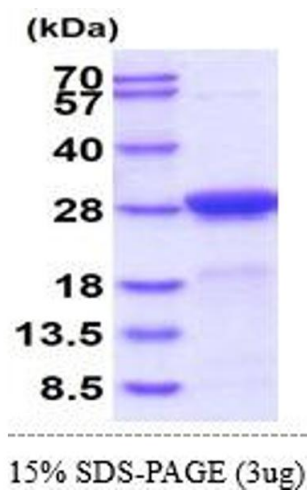
Alternative Name:	Ak1 ( <a href="#">AK1 Products</a> )
Background:	<p>Ak1, also known as Adenylate kinase isoenzyme 1 isoform 1, is an enzyme involved in regulating the adenine nucleotide composition within a cell by catalyzing the reversible transfer of the terminal phosphate group between ATP and AMP. 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 mouse Ak1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.</p>
Molecular Weight:	25.5 kDa (233aa) confirmed by MALDI-TOF
NCBI Accession:	<a href="#">NP_067490</a>
UniProt:	<a href="#">Q9R0Y5</a>
Pathways:	<a href="#">Nucleotide Phosphorylation</a> , <a href="#">Ribonucleoside Biosynthetic Process</a>

## Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	Bioactivity Validated
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Concentration:	0.5 mg/mL
Buffer:	Liquid. In 20 mM Tris-HCl buffer ( pH 8.0) containing 10 % glycerol, 1 mM DTT
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.



SDS-PAGE

Image 1.