

### Datasheet for ABIN7556206

# Adenylate Kinase 1 Protein (AK1) (AA 1-194) (His tag)



#### Overview

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Quantity:	1 mg
Target:	Adenylate Kinase 1 (AK1)
Protein Characteristics:	AA 1-194
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Adenylate Kinase 1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)
Product Details	
Purpose:	Custom-made recombinat Ak1 Protein expressed in mammalien cells.
Sequence:	MEEKLKKAKI IFVVGGPGSG KGTQCEKIVQ KYGYTHLSTG DLLRAEVSSG SERGKKLSAI
	MEKGELVPLD TVLDMLRDAM LAKVDSSNGF LIDGYPREVK QGEEFEQKIG QPTLLLYVDA
	GAETMTQRLL KRGETSGRVD DNEETIKKRL ETYYNATEPV ISFYDKRGIV RKVNAEGTVD
	TVFSEVCTYL DSLK Sequence without tag. The proposed Purification-Tag is based on
	experiences with the expression system, a different complexity of the protein could make
	another tag necessary. In case you have a special request, please contact us.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.
	<ul> <li>Protein expressed in mammalien cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> </ul>

• State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity: > 90 % as determined by Bis-Tris Page, Western Blot

Grade: custom-made

## Target Details

Target:	Adenylate Kinase 1 (AK1)
Alternative Name:	Ak1 (AK1 Products)
Background:	Adenylate kinase isoenzyme 1 (AK 1) (EC 2.7.4.10) (EC 2.7.4.3) (EC 2.7.4.6) (ATP-AMP
	transphosphorylase 1) (ATP:AMP phosphotransferase) (Adenylate monophosphate kinase)
	(Myokinase), FUNCTION: Catalyzes the reversible transfer of the terminal phosphate group
	between ATP and AMP (By similarity). Exhibits nucleoside diphosphate kinase activity,
	catalyzing the production of ATP, CTP, GTP, UTP, dATP, dCTP, dGTP and dTTP from the
	corresponding diphosphate substrates with either ATP or GTP as phosphate donor (By
	similarity). Also catalyzes at a very low rate the synthesis of thiamine triphosphate (ThTP) from
	thiamine diphosphate (ThDP) and ADP (By similarity). May provide a mechanism to buffer the
	adenylate energy charge for sperm motility (PubMed:16790685).
	{ECO:0000250 UniProtKB:P00568, ECO:0000250 UniProtKB:P05081,
	ECO:0000269 PubMed:16790685}.
Molecular Weight:	21.5 kDa
UniProt:	Q9R0Y5
Pathways:	Nucleotide Phosphorylation, Ribonucleoside Biosynthetic Process

# **Application Details**

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months