

# Datasheet for ABIN7556289 **AK4 Protein (AA 1-223) (His tag)**



## Overview

Quantity:	1 mg
Target:	AK4
Protein Characteristics:	AA 1-223
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This AK4 protein is labelled with His tag.

#### Product Details

Product Details	
Purpose:	Custom-made recombinant Ak4 Protein expressed in mammalian cells.
Sequence:	MASKLLRAVI LGPPGSGKGT VCERIAQNFG LQHLSSGHLL RENLKTGTEV GDVAKQYLEK
	GLLVPDHVIT RLMMSELETR SAQHWLLDGF PRTLVQAEAL DGICDVDLVI SLNIPFETLK
	DRLSRRWIHP SSGRVYNLDF NPPQVQGIDD ITGEPLVQQE DDKPEAVAAR LRRYKDAAKP
	VIELYKSRGV LHQFSGTETN RIWPYVYTLF SNKITPIQSK EAY 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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.

- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

A 1 / A

### **Target Details**

Target:	AK4
Alternative Name:	Ak4 (AK4 Products)
Background:	Adenylate kinase 4, mitochondrial (AK 4) (EC 2.7.4.10) (EC 2.7.4.6) (Adenylate kinase 3-like)
	(Adenylate kinase isoenzyme 4) (GTP:AMP phosphotransferase AK4),FUNCTION: Involved in
	maintaining the homeostasis of cellular nucleotides by catalyzing the interconversion of
	nucleoside phosphates (By similarity). Efficiently phosphorylates AMP and dAMP using ATP as
	phosphate donor, but phosphorylates only AMP when using GTP as phosphate donor (By
	similarity). Also displays broad nucleoside diphosphate kinase activity (By similarity). Plays a
	role in controlling cellular ATP levels by regulating phosphorylation and activation of the energy
	sensor protein kinase AMPK (By similarity). Plays a protective role in the cellular response to
	oxidative stress (By similarity). {ECO:0000250 UniProtKB:P27144, ECO:0000255 HAMAP-
	Rule:MF_03170}.
Molecular Weight:	25.1 kDa
UniProt:	Q9WUR9
Pathways:	Nucleotide Phosphorylation, Ribonucleoside Biosynthetic Process

# **Application Details**

Application Notes:	We expect the protein to work for functional studies. 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