

# Recombinant human Adenosine Kinase/ADK protein

Catalog Number: ATGP0558

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

22-362aa

### UniProt No.

P55263

### NCBI Accession No.

NP\_006712

### Alternative Names

ADK, AK, Adenosine kinase, Adenosine 5'-phosphotransferase

## PRODUCT SPECIFICATION

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### Molecular Weight

40.5 kDa (362aa) confirmed by MALDI-TOF

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 20% glycerol, 1mM EDTA, 50mM NaCl

### Purity

> 95% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

Adenosine kinase, also known as ADK is an abundant enzyme in mammalian tissues that catalyzes the transfer of the gamma-phosphate from ATP to adenosine, thereby serving as a regulator of concentrations of both extracellular adenosine and intracellular adenine nucleotides. Adenosine kinase has widespread effects on the cardiovascular, nervous, respiratory, and immune systems and inhibitors of the enzyme could play an important pharmacological role in increasing intravascular adenosine concentrations and acting as anti-inflammatory agents. Recombinant human Adenosine kinase, fused to His-tag at N-terminus, was expressed in E. coli and

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purified by using conventional chromatography techniques.

## Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MRENILFGMG NPLLDISAVV DKDFLDKYSL KPNDQILAED KHKELFDELV  
KKFKVEYHAG GSTQNSIKVA QWMIQOPHKA ATFFGCIGID KFGEILKRKA AEAHVDAHYY EQNEQPTGTC AACITGDNRS  
LIANLAAANC YKKEKHLBLE KNWMLVEKAR VCYIAGFFLT VSPESVLKVA HHAENNRIF TLNLSAPFIS QFYKESLMKV  
MPYVDILFGN ETEAATFARE QGFETKDIKE IAKKTQALPK MNSKRQRIVI FTQGRDDTIM ATESEVTAFV VLDQDQKEII  
DTNGAGDAFV GGFLSQLVSD KPLTECIRAG HYAASIIIRR TGCTFPEKPD FH

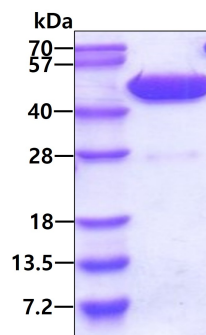
## General References

Chakraborty, A., et al. (2002) J. Biol. Chem. 277:47451-47451.

Sakowicz M., et al. (2001) Acta Biochim Pol. 48(3): 745-54.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.