

# Product information

## Adenosine kinase, 22-362aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP3713

**Synonyms:** ADK, AK

**NCBI Accession No.:** NP\_006712

**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 purified by using conventional chromatography techniques.

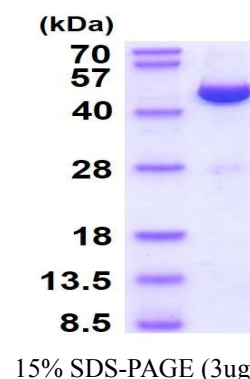
**Form:** Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 20% glycerol, 1mM EDTA, 50mM NaCl

**Molecular Weight:** 40.5 kDa (362aa ) confirmed by MALDI-TOF

**Purity:** > 95% by SDS-PAGE

**Concentration:** 0.5 mg/ml (determined by Bradford assay)

**Biological activity:** Specific activity is > 30 pmol/min/ug and is defined as the amount of enzyme that convert 1.0 pmole of adenosine to AMP per minute at pH 7.5 at 37C in a couple system with PK and LDH.



### Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MRENILFGMG NPLLDISAVV DKDFLDKYSL KPNDQILAED KHKELFDELV KFKVEYHAG GSTQNSIKVA  
 QWMIQQPHKA 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.

**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**



Manufactured for:  
 Immuno-Biological Laboratories, Inc. (IBL-America)  
 8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA  
 Phone: (888) 523-1246 Fax.: (763) 780-2988  
 Email: [info@ibl-america.com](mailto:info@ibl-america.com) Web: [www.ibl-america.com](http://www.ibl-america.com)

# Product information

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**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.  
Avoid repeated freezing and thawing cycles.

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8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA  
Phone: (888) 523-1246 Fax.: (763) 780-2988  
Email: [info@ibl-america.com](mailto:info@ibl-america.com) Web: [www.ibl-america.com](http://www.ibl-america.com)