

### **ADK Antibody (N-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7091a

# **Specification**

## ADK Antibody (N-term) - Product Information

Application WB,E
Primary Accession P55263

Other Accession
Reactivity
Q64640, P55264
Human, Mouse

Predicted Rat
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 40545
Antigen Region 35-65

# ADK Antibody (N-term) - Additional Information

#### Gene ID 132

### **Other Names**

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

### Target/Specificity

This ADK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 35-65 amino acids from the N-terminal region of human ADK.

### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

ADK Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **ADK Antibody (N-term) - Protein Information**

Name ADK (HGNC:257)





**Function** Catalyzes the phosphorylation of the purine nucleoside adenosine at the 5' position in an ATP-dependent manner. Serves as a potential regulator of concentrations of extracellular adenosine and intracellular adenine nucleotides.

Cellular Location [Isoform 1]: Nucleus

#### **Tissue Location**

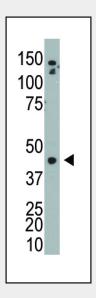
Widely expressed. Highest level in placenta, liver, muscle and kidney.

## **ADK Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## ADK Antibody (N-term) - Images

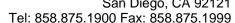


The anti-ADK Pab (Cat. #AP7091a) is used in Western blot to detect ADK in mouse bladder tissue lysate.

### ADK Antibody (N-term) - Background

Adenosine kinase (ATP:adenosine 5-prime-phosphotransferase) is an abundant enzyme in mammalian tissues that catalyzes the transfer of the gamma-phosphate from ATP to adenosine, thereby serving as a potentially important regulator of concentrations of both extracellular adenosine and intracellular adenine nucleotides. Adenosine has widespread effects on the cardiovascular, nervous, respiratory, and immune systems and inhibitors of ADK could play an important pharmacological role in increasing intravascular adenosine concentrations and acting as antiinflammatory agents. The encoded protein does not present any sequence similarities to other







well-characterized mammalian nucleoside kinases. In contrast, 2 regions were identified with significant sequence identity to microbial ribokinase and fructokinases and a bacterial inosine/guanosine kinase. Thus, ADK is a structurally distinct mammalian nucleoside kinase that appears to be akin to sugar kinases of microbial origin. Animal studies have demonstrated that a deficiency of adenosine metabolism a powerful contributor to the development of neonatal hepatic steatosis, providing a model for the rapid development of postnatally lethal fatty liver.