10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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	Q64640, P55264
Reactivity	**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

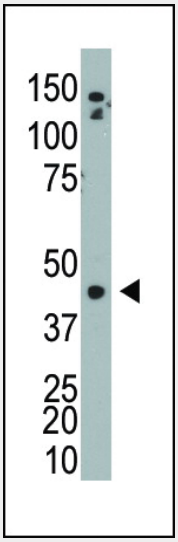
Tissue Location
Widely expressed. Highest level in placenta, liver, muscle and kidney.

ADK Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- 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.