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

ADK Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP7091a

Specification

ADK Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P55263

ADK Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 132

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7091a was selected from the N-term region of human ADK . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ADK Antibody (N-term) Blocking Peptide - 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.

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

ADK Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

ADK Antibody (N-term) Blocking Peptide - Images

ADK Antibody (N-term) Blocking Peptide - 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.