

Rabbit Anti-ADK antibody

SL2778R

Product Name:	ADK
Chinese Name:	腺苷酸激酶抗体
Alias:	Adenosine kinase; AK; 5033405D03Rik; AI255373; AI987814; MGC6593; 2310026J05Rik; Adenosine 5'-phosphotransferase; OTTHUMP0000019864; OTTHUMP0000019865; ADK_HUMAN; Adenosine kinase; AK; Full=Adenosine 5'-phosphotransferase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	41kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ADK/adenylate kinase:101-200/362 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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.

Function:

ATP dependent phosphorylation of adenosine and other related nucleoside analogs to monophosphate derivatives. Serves as a potential regulator of concentrations of extracellular adenosine and intracellular adenine nucleotides.

Subunit:

Monomer.

Tissue Specificity:

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

DISEASE:

Hypermethioninemia due to adenosine kinase deficiency (HMAKD) [MIM:614300]: A metabolic disorder characterized by global developmental delay, early-onset seizures, mild dysmorphic features, and characteristic biochemical anomalies, including persistent hypermethioninemia with increased levels of S-adenosylmethionine and S-adenosylhomocysteine. Homocysteine levels are typically normal. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the carbohydrate kinase PfkB family.

SWISS:

P55263

Gene ID:

132

Database links:

Entrez Gene: 132Human

Entrez Gene: 11534Mouse

Omim: 102750Human

SwissProt: P55263Human

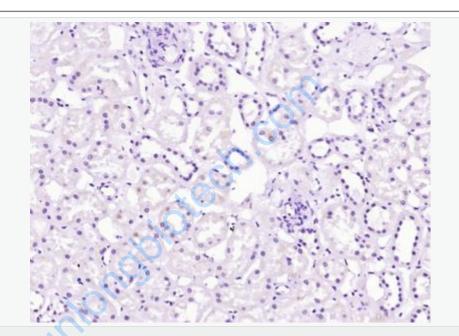
SwissProt: P55264Mouse

Unigene: 656586Human

Unigene: 188734 Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ADK) Polyclonal Antibody, Unconjugated (SL2778R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.