

**ADK Antibody (N-term)**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM8619b****Specification**

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

Application	WB, IHC-P,E
Primary Accession	<a href="#">P55263</a>
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Calculated MW	40545

**ADK Antibody (N-term) - Additional Information****Gene ID** 132**Other Names**

Adenosine kinase, AK, 2.7.1.20, Adenosine 5'-phosphotransferase, ADK

**Target/Specificity**

This ADK antibody is generated from a mouse immunized with a recombinant protein between 1-345 amino acids from human ADK.

**Dilution**

WB~~1:4000

IHC-P~~1:25

E~~Use at an assay dependent concentration.

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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 {ECO:0000303|PubMed:19635462, ECO:0000312|HGNC:HGNC:257}**Function** Adenosine kinase that mediates the phosphorylation of the purine nucleoside adenosine at the 5' position in an ATP-dependent manner: catalyzes phosphorylation of both unmodified and

modified adenosines (PubMed:[21963049](#), PubMed:[40840445](#), PubMed:[6246102](#), PubMed:[8577746](#), PubMed:[9070863](#)). Plays a key role in the detoxification of modified adenosines containing N(6)-methylated adenine (m6A) post- transcriptional modification (PubMed:[40840445](#)). Modified nucleosides are derived from the degradation of RNAs (mRNAs, rRNAs and tRNAs) and possess intrinsic cytotoxicity and must be cleared to prevent metabolic dysfunction (PubMed:[40840445](#)). Catalyzes the phosphorylation of the free cytosolic methylated adenosine nucleotides N(6)-methyladenosine (m6A), N(6),N(6)-dimethyladenosine (m6,6A) and N(6)-isopentenyladenosine (i6A) into adenosine monophosphate (AMP) intermediates that are further detoxified by MAPDA/ADAL (PubMed:[40840445](#)).

#### Cellular Location

Cytoplasm, cytosol. [Isoform 2]: Cytoplasm

#### Tissue Location

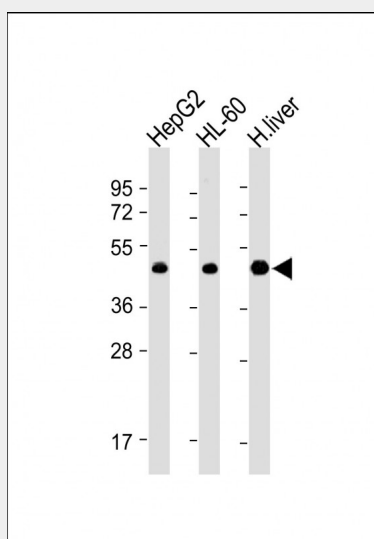
Widely expressed. Highest level in placenta, liver, muscle and kidney.

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

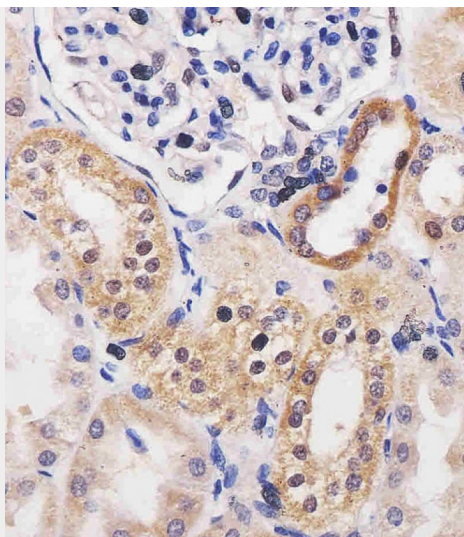
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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



All lanes : Anti-ADK Antibody (N-term) at 1:4000 dilution Lane 1: HepG2 whole cell lysate Lane 2: HL-60 whole cell lysate Lane 3: Human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFD/MTBST.



AM8619b staining ADK in human kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

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

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.

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

Spychala J., et al. Proc. Natl. Acad. Sci. U.S.A. 93:1232-1237(1996).  
Singh B., et al. Eur. J. Biochem. 241:564-571(1996).  
McNally T., et al. Biochem. Biophys. Res. Commun. 231:645-650(1997).  
Ota T., et al. Nat. Genet. 36:40-45(2004).  
Deloukas P., et al. Nature 429:375-381(2004).