

ADK Antibody

Rabbit mAb

Catalog # AP92587

Product Information

Application	WB
Primary Accession	P55263
Reactivity	Rat, Human
Clonality	Monoclonal
Other Names	Adenosine kinase; adk; AK;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	40545

Additional Information

Dilution	WB 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human ADK
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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).

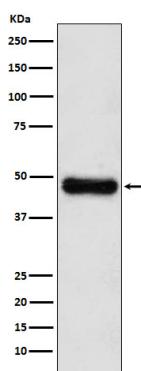
Cellular Location

Cytoplasm, cytosol. [Isoform 2]: Cytoplasm

Tissue Location

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

Images



Western blot analysis of ADK expression in HepG2 cell lysate.

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