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KD-Validated Anti-ADK Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2354

Product Information

Application	WB, ICC
Primary Accession	P55263
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB625
Calculated MW	40545
Gene Name	ADK
Aliases	ADK; Adenosine Kinase; AK; Adenosine 5'-Phosphotransferase; EC 2.7.1.20; Testicular Tissue Protein Li 14; EC 2.7.1
Immunogen	A synthesized peptide derived from human ADK

Additional Information

Gene ID	132
Other Names	Adenosine kinase, AK, 2.7.1.20, Adenosine 5'-phosphotransferase, ADK (HGNC:257)

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.