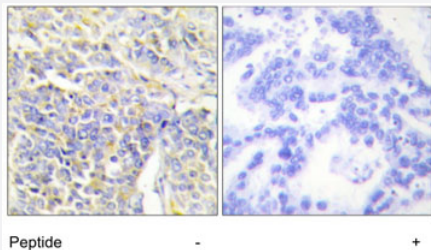


AK1 polyclonal antibody

Catalog # PAB18069 Size 100 ug

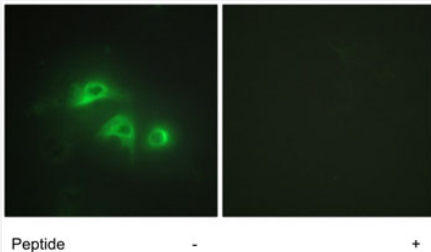
Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using AK1 polyclonal antibody (Cat # PAB18069).

Peptide "+" means "with peptide blocking".



Immunofluorescence

Immunofluorescence analysis of HepG2 cells, using AK1 polyclonal antibody (Cat # PAB18069).

Peptide "+" means "with peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of AK1.
Immunogen	A synthetic peptide corresponding to human AK1.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to AK1.
Form	Liquid

Recommend Usage	Immunohistochemistry (1:50~1:100) Immunofluorescence (1:500~1:1000) ELISA (1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using AK1 polyclonal antibody (Cat # PAB18069).

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- Immunohistochemistry

- Immunofluorescence

Immunofluorescence analysis of HepG2 cells, using AK1 polyclonal antibody (Cat # PAB18069).

Peptide "+" means "with peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

Gene Info — AK1

Entrez GeneID	203
Protein Accession#	P00568
Gene Name	AK1
Gene Alias	-
Gene Description	adenylate kinase 1
Omim ID	103000
Gene Ontology	Hyperlink

Gene Summary

Adenylate kinase is an enzyme involved in regulating the adenine nucleotide composition within a cell by catalyzing the reversible transfer of phosphate group among adinine nucleotides. Three isozymes of adenylate kinase have been identified in vertebrates, adenylate isozyme 1 (AK1), 2 (AK2) and 3 (AK3). AK1 is found in the cytosol of skeletal muscle, brain and erythrocytes, whereas AK2 and AK3 are found in the mitochondria of other tissues including liver and heart. AK1 was identified because of its association with a rare genetic disorder causing nonspherocytic hemolytic anemia where a mutation in the AK1 gene was found to reduce the catalytic activity of the enzyme. [provided by RefSeq]

Other Designations

ATP-AMP transphosphorylase|OTTHUMP00000022217|OTTHUMP00000022218|myokinase

Publication Reference

- [The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection \(MGC\).](#)

Gerhard DS, Wagner L, Feingold EA, Shenmen CM, Grouse LH, Schuler G, Klein SL, Old S, Rasooly R, Good P, Guyer M, Peck AM, Derge JG, Lipman D, Collins FS, Jang W, Sherry S, Feolo M, Misquitta L, Lee E, Rotmistrovsky K, Greenhut SF, Schaefer CF, Buetow K, Bonner TI, Haussler D, Kent J, Kiekhaus M, Furey T, Brent M, Prange C, Schreiber K, Shapiro N, Bhat NK, Hopkins RF, Hsie F, Driscoll T, Soares MB, Casavant TL, Scheetz TE, Brown-stein MJ, Usdin TB, Toshiyuki S, Carninci P, Piao Y, Dudekula DB, K

Genome Research 2004 Oct; 14(10B):2121.

- [Human adenylate kinase deficiency associated with hemolytic anemia. A single base substitution affecting solubility and catalytic activity of the cytosolic adenylate kinase.](#)

Matsuura S, Igarashi M, Tanizawa Y, Yamada M, Kishi F, Kajii T, Fujii H, Miwa S, Sakurai M, Nakazawa A.

The Journal of Biological Chemistry 1989 Jun; 264(17):10148.

Application: AFC, RIA, WB-Ce, Human, Human erythrocytes

- [Primary and tertiary structure of the principal human adenylate kinase.](#)

Von Zabern I, Wittmann-Liebold B, Untucht-Grau R, Schirmer RH, Pai EF.

European Journal of Biochemistry 1976 Sep; 68(1):281.

Pathway

- [Metabolic pathways](#)
- [Purine metabolism](#)

Disease

- [Fetal Growth Retardation](#)