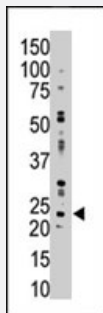


AK1 polyclonal antibody

Catalog # PAB4040

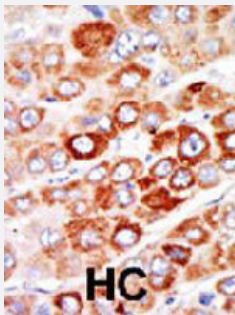
Size 400 uL

Applications



Western Blot (Cell lysate)

The AK1 polyclonal antibody (Cat # PAB4040) is used in Western blot to detect AK1 in CHO cell lysate.



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

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with AK1 polyclonal antibody (Cat # PAB4040), which was peroxidase-conjugated to the secondary antibody, followed by AEC staining.

This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of AK1.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human AK1.
Host	Rabbit
Reactivity	Hamster, Human
Form	Liquid
Purification	Protein G purification

Recommend Usage	ELISA (1:1000) Western Blot (1:100-500) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage 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

- Western Blot (Cell lysate)

The AK1 polyclonal antibody (Cat # PAB4040) is used in Western blot to detect AK1 in CHO cell lysate.

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

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — AK1

Entrez GeneID	203
Protein Accession#	NP_000467: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

- [Red cell adenylate kinase deficiency: molecular study of 3 new mutations \(118G→A, 190G→A, and GAC deletion\) associated with hereditary nonspherocytic hemolytic anemia.](#)

Corrons JL, Garcia E, Tusell JJ, Varughese KI, West C, Beutler E.

Blood 2003 Jul; 102(1):353.

- [Congenital haemolytic anaemia associated with adenylate kinase deficiency.](#)

Toren A, Brok-Simoni F, Ben-Bassat I, Holtzman F, Mandel M, Neumann Y, Ramot B, Rechavi G, Kende G.

British Journal of Haematology 1994 Jun; 87(2):376.

- [Regional assignment of the loci for adenylate kinase to 9q32 and for alpha 1-acid glycoprotein to 9q31-q32. A locus for Goltz syndrome in region 9q32-qter?](#)

Zuffardi O, Caiulo A, Maraschio P, Tupler R, Bianchi E, Amisano P, Beluffi G, Moratti R, Liguri G.

Human Genetics 1989 Apr; 82(1):17.

Pathway

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

Disease

- [Fetal Growth Retardation](#)