

Rabbit AK1 Polyclonal Antibody | anti-AK1 antibody

AK1 Antibody

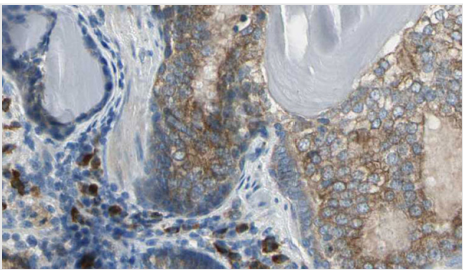
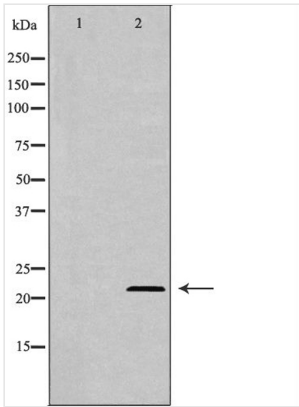
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326126	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

AK1; Polyclonal Antibody; AK1 Antibody; Adenylate kinase 1; Adenylate kinase isoenzyme 1; Adenylate kinase soluble; AK 1; Ak1; ATP AMP transphosphorylase; ATP-AMP transphosphorylase 1; KAD1; KAD1_HUMAN; Myokinase; anti-AK1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	AK1 antibody detects endogenous levels of total AK1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	194
Applicable Applications for anti-AK1 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human AK1
Subcellular Location	Cytoplasm.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA326126 at 1/100 staining Human prostate tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of HEK-293T lysate using AK1 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-AK1 antibody

Description: 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, Jul 2008]

Function: Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. Also displays broad nucleoside diphosphate kinase activity. Plays an important role in cellular energy homeostasis and in adenine nucleotide metabolism.

Subunit Structure: Monomer.

Similarity: Consists of three domains, a large central CORE domain and two small peripheral domains, NMPbind and LID, which undergo movements during catalysis. The LID domain closes over the site of phosphoryl transfer upon ATP binding. Assembling and dissambling the active center during each catalytic cycle provides an effective means to prevent ATP hydrolysis. Belongs to the adenylate kinase family. AK1 subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502011
NCBI GeneID	203
NCBI Accession #	NP_000467.1
NCBI GenBank Nucleotide #	NM_000476.2
UniProt Accession #	P00568; Q9BVK9; Q9UQC7
Molecular Weight	Observed: 22 kDa Predicted: 22 kDa
NCBI Official Full Name	adenylate kinase isoenzyme 1 isoform 1
NCBI Official Synonym Full Names	adenylate kinase 1
NCBI Official Symbol	AK1
NCBI Official Synonym Symbols	HTL-S-58j
NCBI Protein Information	adenylate kinase isoenzyme 1
UniProt Protein Name	Adenylate kinase isoenzyme 1

UniProt Gene Name	AK1
UniProt Synonym Gene Names	AK 1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/ak1-antibody-immunohistochemistry-western-blot-elisa/326126>