

Rabbit AK2 Polyclonal Antibody | anti-AK2 antibody

AK2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329047	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Zebrafish(88%), Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%), Chicken(88%), Xenopus(100%)	ELISA

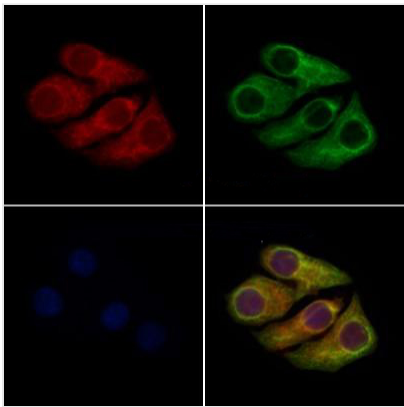
PRODUCT SYNONYMS

AK2; Polyclonal Antibody; AK2 Antibody; Adenylate kinase 2; adenylate kinase 2; mitochondrial; Adenylate kinase isoenzyme 2; ADK2; AK 2; ak2; ATP AMP transphosphorylase; ATP-AMP transphosphorylase 2; EC 2.7.4.3; KAD2_HUMAN; anti-AK2 antibody

PRODUCT SPECIFICATIONS

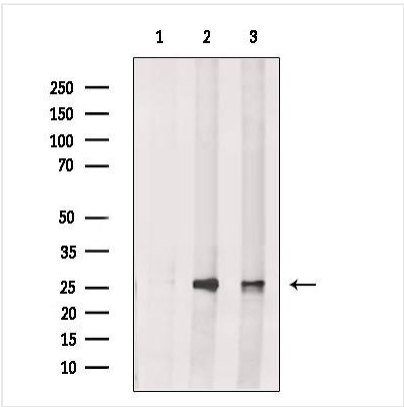
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Zebrafish(88%), Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%), Chicken(88%), Xenopus(100%)
Clonality	Polyclonal
Isotype	IgG
Specificity	AK2 Antibody detects endogenous levels of total AK2.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Concentration	1mg/ml (varies by lot)
Sequence Length	239
Applicable Applications for anti-AK2 antibody	ELISA
Immunogen	A synthesized peptide derived from human AK2, corresponding to a region within the internal amino acids.
Fragment	Fab fragment
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA329047 staining HeLa cells by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25Å°C. Samples were then incubated with primary Ab(AAA329047 1:200) and mouse anti-beta tubulin Ab(T0023 1:200) for 1 hour at 37Å°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI(blue).



WB (Western Blot)

Western blot analysis of extracts from various samples, using AK2 Antibody. Lane 1: Mouse testis, treated with blocking peptide; Lane 2: Mouse testis; Lane 3: HeLa cells.

ADDITIONAL INFORMATION

Related Product Information for anti-AK2 antibody	Function: Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. Plays an important role in cellular energy homeostasis and in adenine nucleotide metabolism. Adenylate kinase activity is critical for regulation of the phosphate utilization and the AMP de novo biosynthesis pathways. Plays a key role in hematopoiesis.
	Subcellular Location: Mitochondrion intermembrane space.
	Tissue Specificity: Present in most tissues. Present at high level in heart, liver and kidney, and at low level in brain, skeletal muscle and skin. Present in thrombocytes but not in erythrocytes, which lack mitochondria. Present in all nucleated cell populations from blood, while AK1 is mostly absent. In spleen and lymph nodes, mononuclear cells lack AK1, whereas AK2 is readily detectable. These results indicate that leukocytes may be susceptible to defects caused by the lack of AK2, as they do not express AK1 in sufficient amounts to compensate for the AK2 functional deficits (at protein level).
	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 disassembling the active center during each catalytic cycle provides an effective means to prevent ATP hydrolysis. Belongs to the adenylate kinase family. AK2 subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	1708596
NCBI GeneID	204
UniProt Accession #	P54819
Molecular Weight	Observed Molecular Weight: (Observed)26kD. Predicted Molecular Weight: (Calculated)26kDa.
NCBI Official Full Name	Adenylate kinase 2, mitochondrial
NCBI Official Synonym Full Names	adenylate kinase 2
NCBI Official Symbol	AK2
NCBI Official Synonym Symbols	ADK2

NCBI Protein Information	adenylate kinase 2, mitochondrial
UniProt Protein Name	Adenylate kinase 2, mitochondrial
UniProt Gene Name	AK2
UniProt Entry Name	KAD2_HUMAN

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ak2-antibody-elisa/329047>