

Datasheet for ABIN2783244

anti-Adenylate Kinase 1 antibody (N-Term)[Go to Product page](#)**2** Images

Overview

Quantity:	100 µL
Target:	Adenylate Kinase 1 (AK1)
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat, Rabbit, Dog, Cow, Guinea Pig, Sheep, Horse, Zebrafish (Danio rerio)
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Adenylate Kinase 1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the N terminal region of human AK1
Sequence:	HLSTGDLLRS EVSSGSARGK KLSEIMEKGQ LVPLETVLDM LRDAMVAKVN
Predicted Reactivity:	Cow: 92%, Dog: 92%, Guinea Pig: 93%, Horse: 92%, Human: 100%, Mouse: 86%, Rabbit: 93%, Rat: 93%, Sheep: 92%, Zebrafish: 77%
Characteristics:	This is a rabbit polyclonal antibody against AK1. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

Target Details

Target:	Adenylate Kinase 1 (AK1)
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Target Details

Alternative Name:	AK1 (AK1 Products)
Background:	<p>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.</p> <p>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. Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Entrez Gene record to access additional publications.</p> <p>Alias Symbols: -</p> <p>Protein Interaction Partner: UBC, IDH1, APP, TERF2IP, TINF2, TERF1, TRIM63, FHL2, KMT2C, Protein Size: 194</p>

Molecular Weight:	22 kDa
Gene ID:	203
NCBI Accession:	NM_000476 , NP_000467
UniProt:	P00568
Pathways:	Nucleotide Phosphorylation , Ribonucleoside Biosynthetic Process

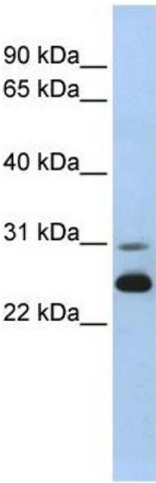
Application Details

Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 194 AA
Restrictions:	For Research Use only

Handling

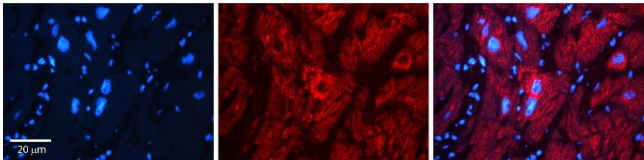
Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

Images



Western Blotting

Image 1. WB Suggested Anti-AK1 Antibody Titration: 0.2-1 ug/ml ELISA Titer: 1:312500 Positive Control: Human Muscle



Immunohistochemistry

Image 2. Rabbit Anti-AK1 Antibody Formalin Fixed Paraffin Embedded Tissue: Human heart Tissue Observed Staining: Cytoplasmic Primary Antibody Concentration: N/A Other Working Concentrations: 1:600 Secondary Antibody: Donkey anti-Rabbit-Cy3 Secondary Antibody Concentration: 1:200 Magnification: 20X Exposure Time: 0.5 - 2.0 sec