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Rabbit Anti-Adenylate Kinase 1 antibody

SL0299R

Product Name:	Adenylate Kinase 1
Chinese Name:	腺苷酸激酶-1抗体
Alias:	Adenylate kinase isoenzyme 1; Adenylate kinase soluble; AK 1; AK1; AK-1; ATP AMP transphosphorylase; Myokinase; KAD1_HUMAN; ATP-AMP transphosphorylase 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,Goat,Monkey,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	21kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Adenylate Kinase 1:131-194/194
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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. Small ubiquitous enzyme involved in energy metabolism and nucleotide synthesis that is essential for maintenance and cell growth.

Subunit:
Monomer.

Subcellular Location:
Cytoplasm.

DISEASE:
Defects in AK1 are the cause of hemolytic anemia due to adenylate kinase deficiency (HAAKD) [MIM:612631].

Similarity:
Belongs to the adenylate kinase family.

SWISS:
P00568

Gene ID:
203

Database links:

Entrez Gene: 203Human

Entrez Gene: 11636Mouse

Entrez Gene: 24183Rat

Omim: 103000Human

SwissProt: P00568Human

SwissProt: Q9R0Y5Mouse

SwissProt: P39069Rat

Unigene: 175473Human

Unigene: 29189Mouse

Unigene: 79537Rat

	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. AK1存在于人类红细胞上及某些组织中的具有遗传多态性的同工酶，腺苷酸激酶催化 ATP，AMP 和 ADP 的转化，它是维持各种腺苷酸平衡的关键酶。因此，腺苷酸激酶就成为调控腺苷酸库大小的靶标分子。