



# AK1 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14648
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	IHC;IF;ELISA
<b>Gene Name</b>	AK1
<b>Protein Name</b>	Adenylate kinase isoenzyme 1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human KAD1 . AA range:101-150
<b>Specificity</b>	AK1 Polyclonal Antibody detects endogenous levels of AK1 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	AK1; Adenylate kinase isoenzyme 1; AK 1; ATP-AMP transphosphorylase 1; Myokinase
<b>Observed Band</b>	
<b>Cell Pathway</b>	Cytoplasm.
<b>Tissue Specificity</b>	Chondrosarcoma Lung Metastasis,Colon,Fetal brain cortex,Retina,Skeletal muscle,Synovial mem
<b>Function</b>	catalytic activity:ATP + AMP = 2 ADP.,disease:Defects in AK1 are the cause of hemolytic anemia due to adenylate kinase deficiency [MIM:612631].,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.,online information:Adenylate kinase entry,polymorphism:This enzyme represents the most common of at least five alleles.,similarity:Belongs to the adenylate kinase family.,subunit:Monomer.,
<b>Background</b>	adenylate kinase 1(AK1) Homo sapiens This gene encodes an adenylate kinase enzyme involved in energy metabolism and homeostasis of cellular adenine nucleotide ratios in different intracellular compartments. This gene is highly expressed in skeletal muscle, brain and erythrocytes. Certain mutations in this gene resulting in a functionally inadequate enzyme are associated with a rare



genetic disorder causing nonspherocytic hemolytic anemia. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2015],

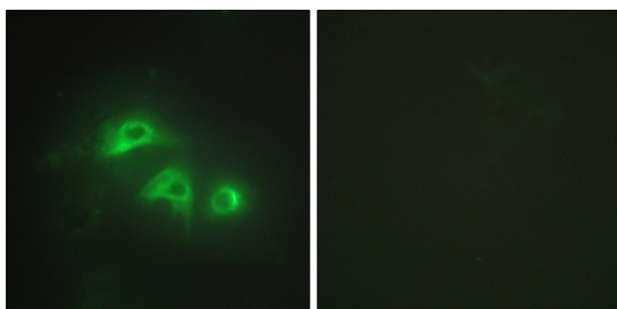
**matters needing attention**

Avoid repeated freezing and thawing!

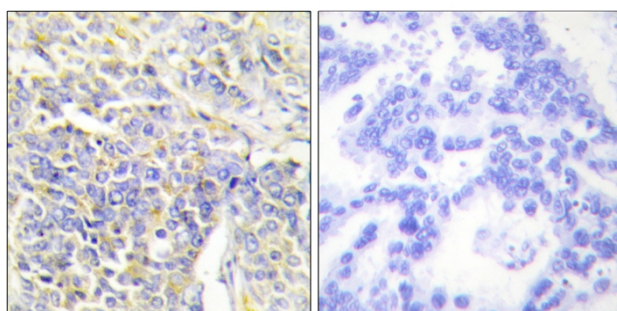
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**



Immunofluorescence analysis of HepG2 cells, using KAD1 Antibody . The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using KAD1 Antibody . The picture on the right is blocked with the synthesized peptide.