

## **AK1 Polyclonal Antibody**

Catalog No: YT0156

**Reactivity:** Human; Mouse; Rat

**Applications:** IHC;IF;ELISA

Target: AK1

**Fields:** >>Purine metabolism;>>Thiamine metabolism;>>Metabolic

pathways;>>Nucleotide metabolism;>>Biosynthesis of cofactors

Gene Name: AK1

Protein Name: Adenylate kinase isoenzyme 1

P00568

Q9R0Y5

Human Gene Id: 203

**Human Swiss Prot** 

No:

Mouse Gene Id: 11636

**Mouse Swiss Prot** 

No:

Rat Gene Id: 24183

Rat Swiss Prot No: P39069

**Immunogen :** The antiserum was produced against synthesized peptide derived from human

KAD1 . AA range:101-150

**Specificity:** AK1 Polyclonal Antibody detects endogenous levels of AK1 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other

applications.



**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Concentration**: 1 mg/ml

**Storage Stability:** -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 22kD

**Cell Pathway :** Purine metabolism;

**Background:** 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],

**Function:** 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.,

Subcellular Cytoplasm.
Location:

**Expression:** Chondrosarcoma Lung Metastasis, Colon, Fetal brain cortex, Retina, Skeletal

muscle, Synovial mem

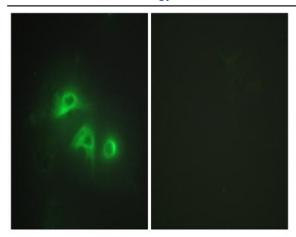
**Sort**: 1821

No4:

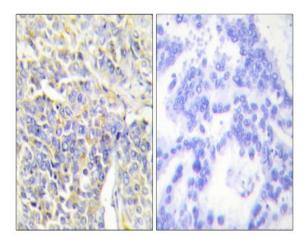
**Host:** Rabbit

Modifications: Unmodified

## **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.