

# Product datasheet

info@arigobio.com

ARG54901 anti-AK1 antibody

Package: 100 μl Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes AK1

Tested Reactivity Hu, Ms, Rat

Tested Application IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG
Target Name AK1

Species Human

Immunogen Recombinant protein of Human AK1 (NP\_000467.1)

Conjugation Un-conjugated

Alternate Names Myokinase; Adenylate kinase isoenzyme 1; ATP-AMP transphosphorylase 1; ATP:AMP

phosphotransferase; EC 2.7.4.6; HTL-S-58j; EC 2.7.4.3; Adenylate monophosphate kinase; AK 1

## **Application Instructions**

Application table	Application	Dilution
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Mouse heart	

#### **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol AK1

Gene Full Name adenylate kinase 1

Background 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]

Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. Also displays

broad nucleoside diphosphate kinase activity. Plays an important role in cellular energy homeostasis and

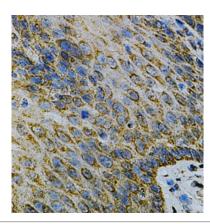
in adenine nucleotide metabolism. [UniProt]

Research Area Cell Biology and Cellular Response antibody; Metabolism antibody; Signaling Transduction antibody

Calculated Mw 22 kDa

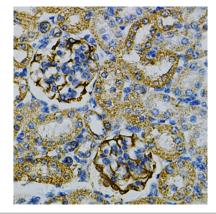
## **Images**

Function



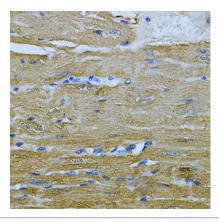
#### ARG54901 anti-AK1 antibody IHC-P image

Immunohistochemistry: Human esophagus stained with ARG54901 anti-AK1 antibody at 1:100 dilution.



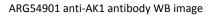
## ARG54901 anti-AK1 antibody IHC-P image

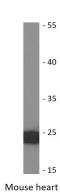
Immunohistochemistry: Rat kidney stained with ARG54901 anti-AK1 antibody at 1:100 dilution.



#### ARG54901 anti-AK1 antibody IHC-P image

Immunohistochemistry: Mouse heart stained with ARG54901 anti-AK1 antibody at 1:100 dilution.





Western blot: Mouse heart lysate stained with ARG54901 anti-AK1 antibody.