

**ARG54901**  
**anti-AK1 antibody**Package: 100 µl  
Store at: -20°C**Summary**

Product Description	Rabbit Polyclonal antibody recognizes AK1
Tested Reactivity	Hu, Ms
Tested Application	ICC/IF, 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
	ICC/IF	1:50 - 1:200
	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	

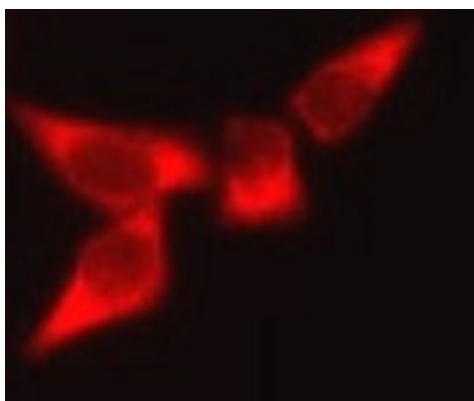
**Properties**

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

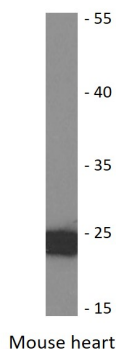
Database links	<a href="#">GeneID: 11636 Mouse</a> <a href="#">GeneID: 203 Human</a> <a href="#">Swiss-port # P00568 Human</a> <a href="#">Swiss-port # Q9R0Y5 Mouse</a>
Gene Symbol	AK1
Gene Full Name	adenylate kinase 1
Background	Adenylate kinase is an enzyme involved in regulating the adenine nucleotide 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]
Function	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



ARG54901 anti-AK1 antibody ICC/IF image

Immunofluorescence: A549 cells stained with ARG54901 anti-AK1 antibody.



ARG54901 anti-AK1 antibody WB image

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