

ARG54806 anti-AK4 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes AK4
Tested Reactivity	Hu, Ms
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	AK4
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 119-153 (Center) of Human AK4.
Conjugation	Un-conjugated
Alternate Names	EC 2.7.4.10; AK3; GTP:AMP phosphotransferase AK4; AK3L2; AK3L1; EC 2.7.4.6; AK 4; Adenylate kinase 4, mitochondrial; Adenylate kinase 3-like

Application Instructions

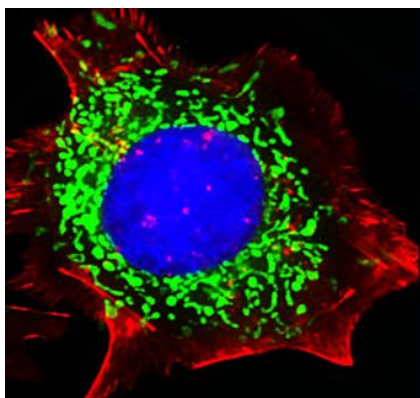
Application table	Application	Dilution
	ICC/IF	1:25
	IHC-P	Assay-dependent
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HepG2	

Properties

Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
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 or below. 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.

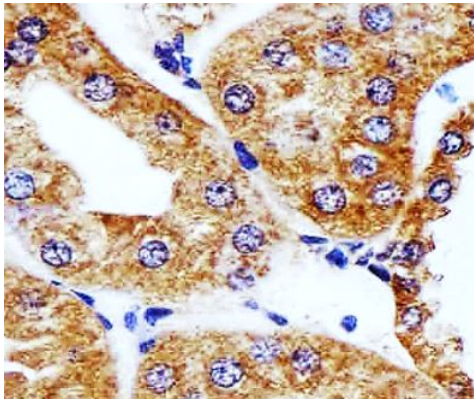
Database links	GeneID: 11639 Mouse GeneID: 205 Human Swiss-port # P27144 Human Swiss-port # Q9WUR9 Mouse
Gene Symbol	AK4
Gene Full Name	adenylate kinase 4
Background	This gene encodes a member of the adenylate kinase family of enzymes. The encoded protein is localized to the mitochondrial matrix. Adenylate kinases regulate the adenine and guanine nucleotide compositions within a cell by catalyzing the reversible transfer of phosphate group among these nucleotides. Five isozymes of adenylate kinase have been identified in vertebrates. Expression of these isozymes is tissue-specific and developmentally regulated. A pseudogene for this gene has been located on chromosome 17. Three transcript variants encoding the same protein have been identified for this gene. Sequence alignment suggests that the gene defined by NM_013410, NM_203464, and NM_001005353 is located on chromosome 1. [provided by RefSeq, Jul 2008]
Function	Involved in maintaining the homeostasis of cellular nucleotides by catalyzing the interconversion of nucleoside phosphates. Efficiently phosphorylates AMP and dAMP using ATP as phosphate donor, but phosphorylates only AMP when using GTP as phosphate donor. Also displays broad nucleoside diphosphate kinase activity. [UniProt]
Research Area	Metabolism antibody; Signaling Transduction antibody
Calculated Mw	25 kDa
Cellular Localization	Mitochondrion matrix {ECO:0000255 HAMAP- Rule:MF_03170, ECO:0000269 PubMed:11485571, ECO:0000269 PubMed:19766732}

Images



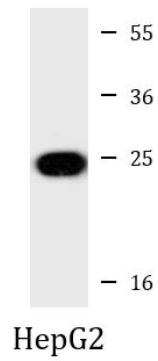
ARG54806 anti-AK4 antibody ICC/IF image

Immunofluorescence: HepG2 cells stained with ARG54806 anti-AK4 antibody (green) at 1:25 dilution. DAPI (blue) for nuclear staining. Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



ARG54806 anti-AK4 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse kidney section stained with ARG54806 anti-AK4 antibody at 1:25 dilution.



ARG54806 anti-AK4 antibody WB image

Western blot: 35 µg of HepG2 lysate stained with ARG54806 anti-AK4 antibody at 1:1000 dilution.