ARG57157
anti-AK2 antibody [7E7]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [7E7] recognizes AK2
Tested Reactivity	Hu
Tested Application	ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Clone	7E7
Isotype	IgG1, kappa
Target Name	AK2
Species	Human
Immunogen	Recombinant fragment around aa. 1-239 of Human AK2
Conjugation	Un-conjugated
Alternate Names	ADK2; Adenylate kinase 2, mitochondrial; ATP-AMP transphosphorylase 2; ATP:AMP phosphotransferase; Adenylate monophosphate kinase; EC 2.7.4.3; AK 2

Application Instructions

Application table

Application	Dilution
ICC/IF	Assay-dependent
WB	Assay-dependent

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

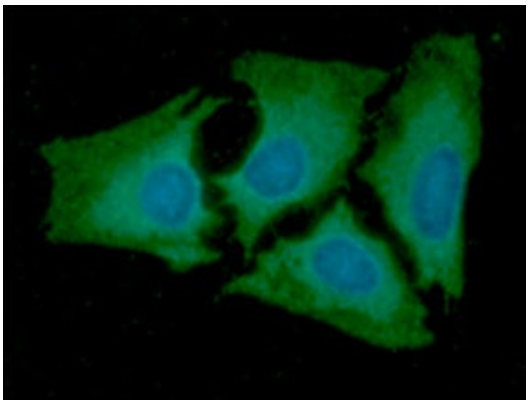
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 mg/ml
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	GeneID: 204 Human Swiss-port # P54819 Human
Gene Symbol	AK2
Gene Full Name	adenylate kinase 2
Background	Adenylate kinases are involved in regulating the adenine nucleotide composition within a cell by catalyzing the reversible transfer of phosphate groups among adenine nucleotides. Three isozymes of adenylate kinase, namely 1, 2, and 3, have been identified in vertebrates; this gene encodes isozyme 2. Expression of these isozymes is tissue-specific and developmentally regulated. Isozyme 2 is localized in the mitochondrial intermembrane space and may play a role in apoptosis. Mutations in this gene are the cause of reticular dysgenesis. Alternate splicing results in multiple transcript variants. Pseudogenes of this gene are found on chromosomes 1 and 2.[provided by RefSeq, Nov 2010]
Function	Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. Plays an important role in cellular energy homeostasis and in adenine nucleotide metabolism. Adenylate kinase activity is critical for regulation of the phosphate utilization and the AMP de novo biosynthesis pathways. Plays a key role in hematopoiesis. [UniProt]
Calculated Mw	26 kDa

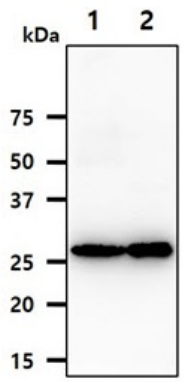
Images



ARG57157 anti-AK2 antibody [7E7] ICC/IF image

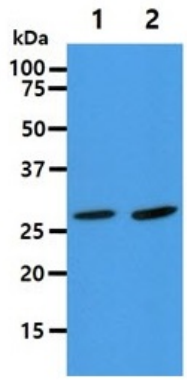
Immunofluorescence: HeLa cells line stained with ARG57157 anti-AK2 antibody [7E7] at 1:100 (Green).

DAPI (Blue) for nucleus staining.



ARG57157 anti-AK2 antibody [7E7] WB image

Western blot: 40 µg of 1) Kidney, and 2) Liver tissue lysates stained with ARG57157 anti-AK2 antibody [7E7] at 1:1000.



ARG57157 anti-AK2 antibody [7E7] WB image

Western blot: 40 µg of 1) HepG2, and 2) NIH/3T3 cell lysates stained with ARG57157 anti-AK2 antibody [7E7] at 1:1000.