10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Adenylate Kinase 1 Antibody

Catalog # AP61464

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P00568
Reactivity	Human, Mouse, Rat, Pig, Chicken, Bovine, Dog, Sheep, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21635

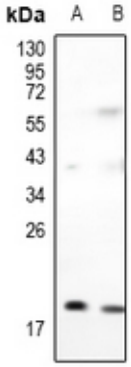
Additional Information

Gene ID	203
Other Names	Adenylate kinase isoenzyme 1; AK 1; ATP-AMP transphosphorylase 1; ATP:AMP phosphotransferase; Adenylate monophosphate kinase; Myokinase
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Adenylate Kinase 1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200), IF/IC (1/50 - 1/200) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

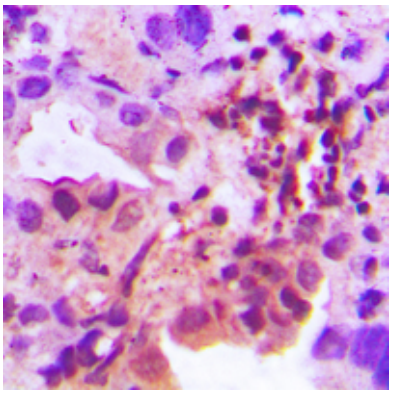
Protein Information

Name	AK1 {ECO:0000255|HAMAP-Rule:MF_03171, ECO:0000312|HGNC:HGNC:361}
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 (By similarity) (PubMed:21080915, PubMed:23416111, PubMed:2542324). Also catalyzes at a very low rate the synthesis of thiamine triphosphate (ThTP) from thiamine diphosphate (ThDP) and ADP (By similarity).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:P05081}.

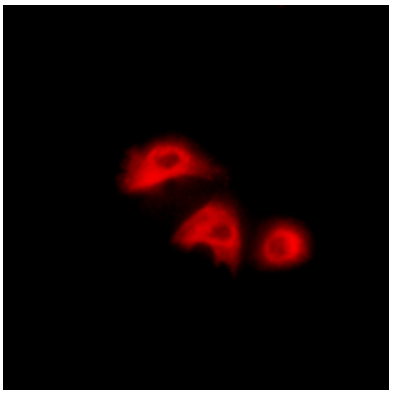
Images



Western blot analysis of Adenylate Kinase 1 expression in A549 (A), A375 (B) whole cell lysates. (Predicted band size: 21 kD; Observed band size: 21 kD)



Immunohistochemical analysis of Adenylate Kinase 1 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Adenylate Kinase 1 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a Alexa Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.