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Anti-Adenylate Kinase 1 Antibody

Rabbit polyclonal antibody to Adenylate Kinase 1
Catalog # AP61464

Specification

Anti-Adenylate Kinase 1 Antibody - Product Information

Application	**WB, IF**
Primary Accession	P00568
Other Accession	Q9R0Y5
Reactivity	**Human, Mouse, Rat, Monkey, Pig, Chicken, Bovine, SARS, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**21635**

Anti-Adenylate Kinase 1 Antibody - 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
Recognizes endogenous levels of Adenylate Kinase 1 protein.

Dilution
WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200), IF/IC (1/50 - 1/200)
IF~~WB (1/500 - 1/1000), IH (1/50 - 1/200), IF/IC (1/50 - 1/200)

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-Adenylate Kinase 1 Antibody - 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).

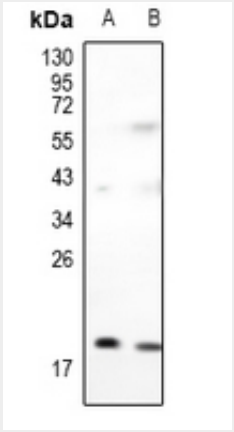
Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:P05081}.

Anti-Adenylate Kinase 1 Antibody - Protocols

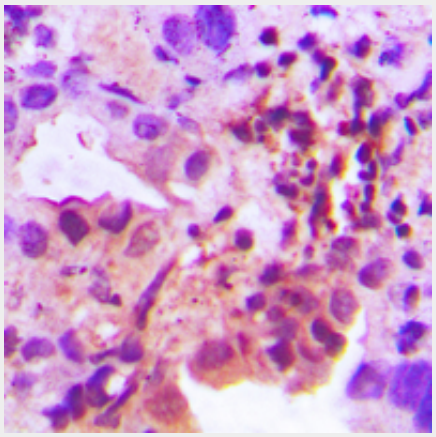
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Adenylate Kinase 1 Antibody - Images



Western blot analysis of Adenylate Kinase 1 expression in A549 (A), A375 (B) whole cell lysates.



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

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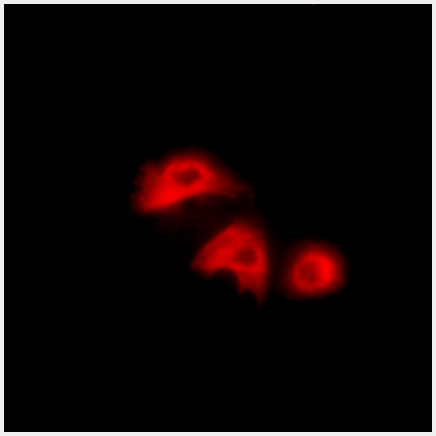
room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



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.

Anti-Adenylate Kinase 1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Adenylate Kinase 1. The exact sequence is proprietary.