

Anti-Adenylate Kinase 1 Antibody

Rabbit polyclonal antibody to Adenylate Kinase 1 Catalog # AP61464

Specification

Anti-Adenylate Kinase 1 Antibody - Product Information

Application WB, IHC, IF
Primary Accession P00568
Other Accession O9R0Y5

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

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~~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:<a



href="http://www.uniprot.org/citations/23416111" target="_blank">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

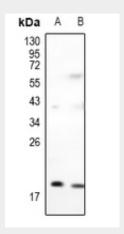
Cytoplasm {ECO:0000250|UniProtKB:P05081}.

Anti-Adenylate Kinase 1 Antibody - Protocols

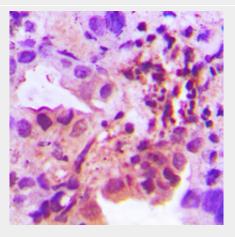
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- 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 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 $^{\circ}$ 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.

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