

**Anti-Adenylate Kinase 1 Antibody**  
Rabbit polyclonal antibody to Adenylate Kinase 1  
Catalog # AP61464

### Specification

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#### Anti-Adenylate Kinase 1 Antibody - Product Information

Application	WB, IF
Primary Accession	<a href="#">P00568</a>
Other Accession	<a href="#">Q9R0Y5</a>
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:<a href="http://www.uniprot.org/citations/21080915" target="\_blank">21080915</a>, PubMed:<a href="http://www.uniprot.org/citations/23416111" target="\_blank">23416111</a>, PubMed:<a href="http://www.uniprot.org/citations/2542324" target="\_blank">2542324</a>). Also catalyzes

at a very low rate the synthesis of thiamine triphosphate (ThTP) from thiamine diphosphate (ThDP) and ADP (By similarity).

#### Cellular Location

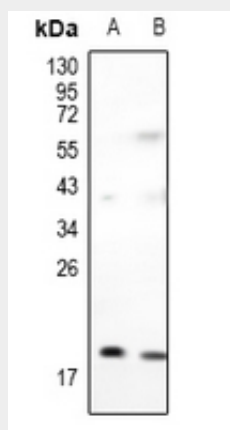
Cytoplasm {ECO:0000250|UniProtKB:P05081}.

### Anti-Adenylate Kinase 1 Antibody - Protocols

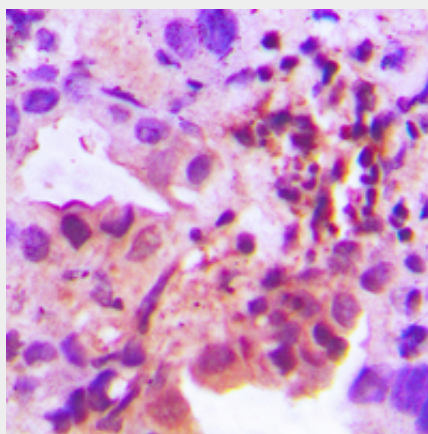
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-Adenylate Kinase 1 Antibody - Images

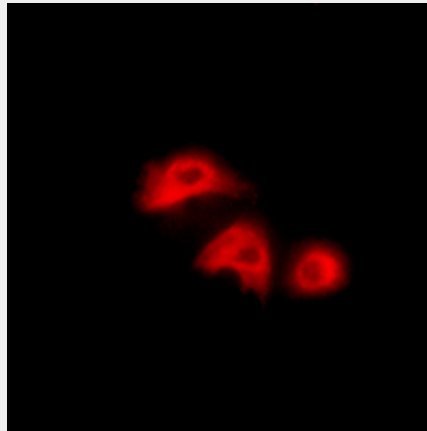


Western blot analysis of Adenylate Kinase 1 expression in A549 (A), A375 (B) whole cell lysates.



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 °C in a humidified 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.