

**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}

**Function**

Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP (PubMed: <a href="http://www.uniprot.org/citations/2542324" target="\_blank">2542324</a>). Exhibits nucleoside diphosphate kinase activity, catalyzing the production of ATP, CTP, GTP, UTP, dATP, dCTP, dGTP and dTTP from the corresponding diphosphate substrates with either ATP or GTP as phosphate donor (PubMed: <a href="http://www.uniprot.org/citations/23416111" target="\_blank">23416111</a>). Also catalyzes at a very low rate the synthesis of thiamine

triphosphate (ThTP) from thiamine diphosphate (ThDP) and ADP (By similarity).

#### Cellular Location

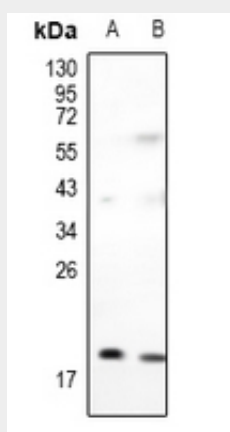
Cytoplasm {ECO:0000250|UniProtKB:P05081}.

### Anti-Adenylate Kinase 1 Antibody - Protocols

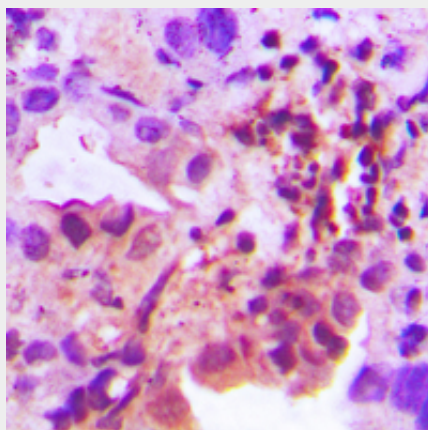
Provided below are standard protocols that you may find useful for product applications.

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

### Anti-Adenylate Kinase 1 Antibody - Images

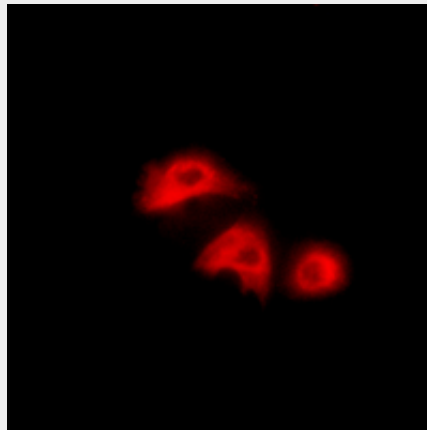


Western blot analysis of Adenylate Kinase 1 expression in A549 (A), A375 (B) whole cell lysates.



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.