

**AK1 Antibody (C-term)**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM8620b****Specification**

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**AK1 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P00568</a>
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Calculated MW	21635

**AK1 Antibody (C-term) - Additional Information****Gene ID 203****Other Names**

Adenylate kinase isoenzyme 1 {ECO:0000255|HAMAP-Rule:MF\_03171}, AK 1 {ECO:0000255|HAMAP-Rule:MF\_03171}, 2.7.4.3 {ECO:0000255|HAMAP-Rule:MF\_03171}, 2.7.4.6 {ECO:0000255|HAMAP-Rule:MF\_03171}, ATP-AMP transphosphorylase 1 {ECO:0000255|HAMAP-Rule:MF\_03171}, ATP:AMP phosphotransferase {ECO:0000255|HAMAP-Rule:MF\_03171}, Adenylate monophosphate kinase {ECO:0000255|HAMAP-Rule:MF\_03171}, Myokinase {ECO:0000255|HAMAP-Rule:MF\_03171}, AK1 {ECO:0000255|HAMAP-Rule:MF\_03171}

**Target/Specificity**

This AK1 antibody is generated from a mouse immunized with a recombinant protein between 1-193 amino acids from human AK1.

**Dilution**

WB~~1:4000

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

AK1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**AK1 Antibody (C-term) - 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:[2542324](#)). 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:[23416111](#)). Also catalyzes at a very low rate the synthesis of thiamine triphosphate (ThTP) from thiamine diphosphate (ThDP) and ADP (By similarity).

**Cellular Location**

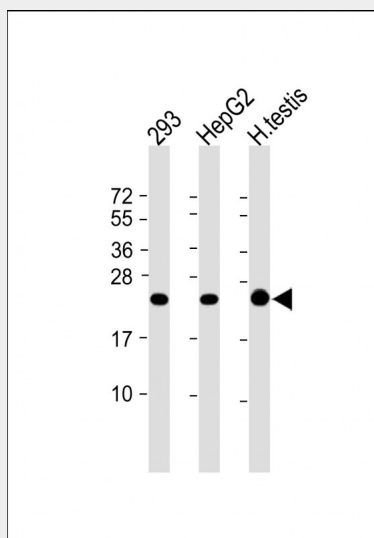
Cytoplasm {ECO:0000250|UniProtKB:P05081}.

**AK1 Antibody (C-term) - 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](#)

**AK1 Antibody (C-term) - Images**



All lanes : Anti-AK1 Antibody (C-term) at 1:4000 dilution Lane 1: 293 whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: Human testis lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

**AK1 Antibody (C-term) - Background**

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.

**AK1 Antibody (C-term) - References**

von Zabern I.,et al.Eur. J. Biochem. 68:281-290(1976).  
Matsuura S.,et al.J. Biol. Chem. 264:10148-10155(1989).  
Noma T.,et al.Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.  
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.  
Lubec G.,et al.Submitted (DEC-2008) to UniProtKB.