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AK1 Antibody (C-term)

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8620b

Product Information

Application	WB, E
Primary Accession	P00568
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1108CT2.4.1
Calculated MW	21635

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 E~~Use at an assay dependent concentration.
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.

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}.

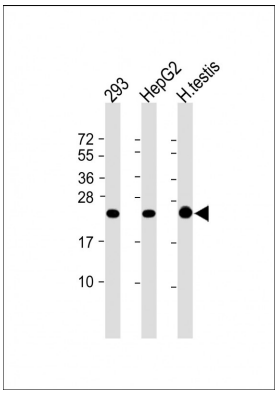
Background

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.

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.

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.