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AK2 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI12650

Product Information

Application	WB
Primary Accession	P54819
Other Accession	NM_001625, NP_001616
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Chicken, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	26478

Additional Information

Gene ID	204
Alias Symbol	ADK2, AK 2
Other Names	Adenylate kinase 2, mitochondrial {ECO:0000255|HAMAP-Rule:MF_03168}, AK 2 {ECO:0000255|HAMAP-Rule:MF_03168}, 2.7.4.3 {ECO:0000255|HAMAP-Rule:MF_03168}, ATP-AMP transphosphorylase 2 {ECO:0000255|HAMAP-Rule:MF_03168}, ATP:AMP phosphotransferase {ECO:0000255|HAMAP-Rule:MF_03168}, Adenylate monophosphate kinase {ECO:0000255|HAMAP-Rule:MF_03168}, Adenylate kinase 2, mitochondrial, N-terminally processed {ECO:0000255|HAMAP-Rule:MF_03168}, AK2 {ECO:0000255|HAMAP-Rule:MF_03168}, ADK2
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 100 ul of distilled water. Final anti-AK2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	AK2 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

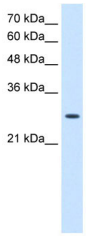
Name	AK2 {ECO:0000255|HAMAP-Rule:MF_03168}
Synonyms	ADK2
Function	Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. Plays an important role in cellular energy homeostasis and in

	adenine nucleotide metabolism. Adenylate kinase activity is critical for regulation of the phosphate utilization and the AMP de novo biosynthesis pathways. Plays a key role in hematopoiesis.
Cellular Location	Mitochondrion intermembrane space {ECO:0000255|HAMAP-Rule:MF_03168}
Tissue Location	Present in most tissues. Present at high level in heart, liver and kidney, and at low level in brain, skeletal muscle and skin. Present in thrombocytes but not in erythrocytes, which lack mitochondria. Present in all nucleated cell populations from blood, while AK1 is mostly absent. In spleen and lymph nodes, mononuclear cells lack AK1, whereas AK2 is readily detectable. These results indicate that leukocytes may be susceptible to defects caused by the lack of AK2, as they do not express AK1 in sufficient amounts to compensate for the AK2 functional deficits (at protein level)

References

Kohler,C.,(1999)FEBSLett.447(1),10-12ReconstitutionandStorage:Forshorttermuse,storeat2-8Cupto1week.Forlongtermstorage,storeat-20Cinsmallaliquotstopreventfreeze-thawcycles.

Images



WB Suggested Anti-AK2 Antibody Titration: 2.5µg/ml
Positive Control: HepG2 cell lysate
There is BioGPS gene expression data showing that AK2 is expressed in HepG2