

# AK2 Antibody

Rabbit mAb

Catalog # AP92946

## Product Information

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<b>Application</b>	WB, IHC, IF, ICC, IP, IHF
<b>Primary Accession</b>	<a href="#">P54819</a>
<b>Reactivity</b>	Rat, Human, Mouse
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	Adenylate kinase 2; ADK2; ak2;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	26478

## Additional Information

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<b>Dilution</b>	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human AK2
<b>Description</b>	Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. This small ubiquitous enzyme involved in energy metabolism and nucleotide synthesis that is essential for maintenance and cell growth. Plays a key role in hematopoiesis.
<b>Storage Condition and Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

## Protein Information

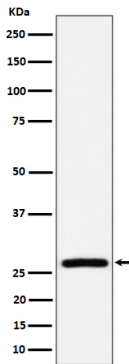
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<b>Name</b>	AK2 {ECO:0000255   HAMAP-Rule:MF_03168}
<b>Synonyms</b>	ADK2
<b>Function</b>	Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. Plays an important role in cellular energy homeostasis and in adenine nucleotide 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.
<b>Cellular Location</b>	Mitochondrion intermembrane space {ECO:0000255   HAMAP-Rule:MF_03168}
<b>Tissue Location</b>	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)

## Images

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Western blot analysis of AK2 expression in HepG2 cell lysate.

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