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AK2 Rabbit mAb

Catalog # AP76382

Product Information

Application	WB, IHC-P, IHC-F, IP
Primary Accession	P54819
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	26478

Additional Information

Gene ID	204
Other Names	AK2
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A IHC-F~~N/A IP~~1:10-1:100
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

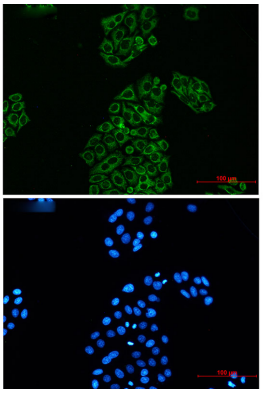
Name	AK2 {ECO:0000255|HAMAP-Rule:MF_03168}
Synonyms	ADK2
Function	Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. Plays an important role in cellular energy homeostasis and in adenine nucleotide metabolism. Adenylate kinase activity is critical for regulation of 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)

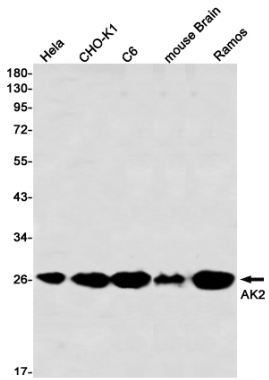
Background

Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP.

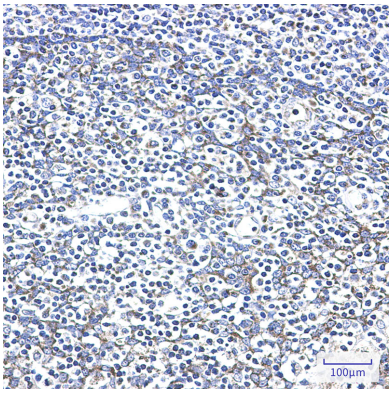
Images



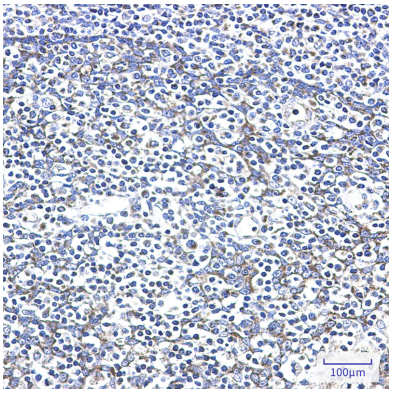
Immunocytochemistry analysis of AK2 (green) in Hela using AK2 antibody,and DAPI(blue).



Western blot analysis of AK2 in Hela, CHO-K1, C6, mouse Brain, Ramos lysates using AK2 antibody.



Immunohistochemistry analysis of paraffin-embedded Human tonsil using AK2 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



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