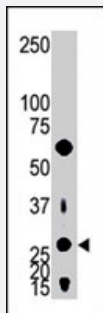


# AK2 polyclonal antibody

Catalog # PAB3994

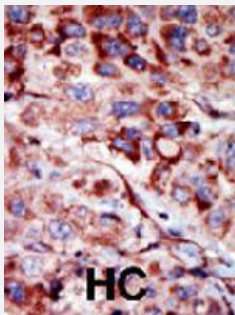
Size 400 uL

## Applications



### Western Blot (Cell lysate)

The AK2 polyclonal antibody (Cat # PAB3994) is used in Western blot to detect AK2 in Jurkat cell lysate.



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with AK2 polyclonal antibody (Cat # PAB3994), which was peroxidase-conjugated to the secondary antibody, followed by AEC staining.

This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

## Specification

|                            |   |
|----------------------------|---|
| <b>Product Description</b> | Rabbit polyclonal antibody raised against synthetic peptide of AK2.                 |
| <b>Immunogen</b>           | A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human AK2. |
| <b>Host</b>                | Rabbit  |
| <b>Reactivity</b>          | Human   |
| <b>Form</b>                | Liquid  |
| <b>Purification</b>        | Protein G purification  |

|                     |   |
|---------------------|---|
| Recommend Usage     | ELISA (1:1000)<br>Western Blot (1:100-500)<br>Immunohistochemistry (1:50-100)<br>The optimal working dilution should be determined by the end user. |
| Storage Buffer      | In PBS (0.09% sodium azide)   |
| Storage Instruction | Store at 4°C. For long term storage store at -20°C.<br>Aliquot to avoid repeated freezing and thawing.  |
| Note                | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.                              |

## Applications

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- Enzyme-linked Immunoabsorbent Assay

## Gene Info — AK2

|                    |                           |
|--------------------|---------------------------|
| Entrez GeneID      | <a href="#">204</a>       |
| Protein Accession# | <a href="#">P54819</a>    |
| Gene Name          | AK2                       |
| Gene Alias         | ADK2                      |
| Gene Description   | adenylate kinase 2        |
| Omim ID            | <a href="#">103020</a>    |
| Gene Ontology      | <a href="#">Hyperlink</a> |

**Gene Summary**

Adenylate kinases are involved in regulating the adenine nucleotide composition within a cell by catalyzing the reversible transfer of phosphate groups among adenine nucleotides. Three isozymes of adenylate kinase, namely 1, 2, and 3, have been identified in vertebrates; this gene encodes isozyme 2. Expression of these isozymes is tissue-specific and developmentally regulated. Isozyme 2 is localized in the mitochondrial intermembrane space and may play a role in apoptosis. Two transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq]

**Other Designations**

ATP-AMP transphosphorylase|OTTHUMP00000004287|OTTHUMP00000004288|adenylate kinase isoenzyme 2, mitochondrial|adenylate kinase, mitochondrial

**Publication Reference**

- [Cloning and expression of human adenylate kinase 2 isozymes: differential expression of adenylate kinase 1 and 2 in human muscle tissues.](#)

Lee Y, Kim JW, Lee SM, Kim HJ, Lee KS, Park C, Choe IS.

Journal of Biochemistry 1998 Jan; 123(1):47.

Application: WB-Ti, Human, Skeletal muscle, Heart

- [cDNA cloning and tissue-specific expression of the gene encoding human adenylate kinase isozyme 2.](#)

Noma T, Song S, Yoon YS, Tanaka S, Nakazawa A.

Biochimica et Biophysica Acta. 1998 Jan; 1395(1):34.

- [Cloning and characterization of cDNA for human adenylate kinase 2A.](#)

Lee Y, Kim JW, Lee IA, Kang HB, Choe YK, Lee HG, Lim JS, Kim HJ, Park C, Choe IS.

Biochemistry and Molecular Biology International 1996 Jul; 39(4):833.

**Pathway**

- [Metabolic pathways](#)
- [Purine metabolism](#)