# Product information

## Monoclonal anti-human AK2 antibody (clone AT7E7)

**Mouse $IgG_1$, κ**

**Cat. No. IBATGA0393**

**Immunogen:** Recombinant human AK2 (1-239aa) purified from *E. coli*

**NCBI Accession No.:** NP_001616

**Isotype:** Mouse $IgG_1$ heavy chain and κ light chain

**Clone:** Anti-human AK2 mAb, clone AT7E7, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human AK2 protein.

**Description:** 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. Mutations in this gene are the cause of reticular dysgenesis. Alternate splicing results in multiple transcript variants.

**Concentration:** 1 mg/ml

**Form:** Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol

**Storage:** Can be stored at +4C. For long term storage, aliquot and store at -20C. Avoid repeated freezing and thawing cycles.

**Usage:** The antibody has been tested by ELISA, Western blot analysis, Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

**Application:** ELISA, WB, Flow cytometry, ICC/IF



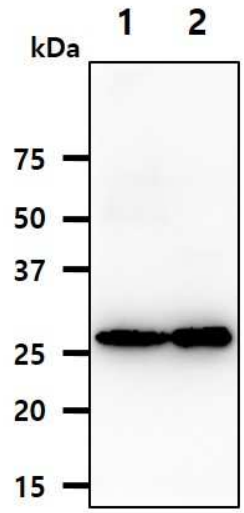
*Manufactured for:*
Immuno-Biological Laboratories, Inc. (IBL-America)
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA
Phone: (888) 523-1246 Fax.: (763) 780-2988
Email: info@ibl-america.com Web: www.ibl-america.com

# Product information

**Western blot analysis**

The Tissue lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human AK2 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

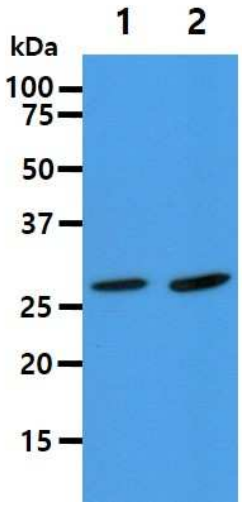
Lane 1.: Kidney tissue lysate
Lane 2.: Liver tissue lysate




**Western blot analysis**

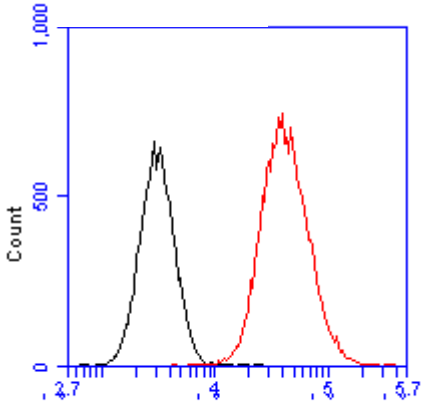
The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human AK2 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: HepG2 cell lysate
Lane 2.: NIH/3T3 cell lysate




**Flow cytometry**

Flow cytometry analysis of AK2 in HeLa cell line, staining at 2-5ug for 1x10$^6$cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).




**Alexa488-anti-AK2**

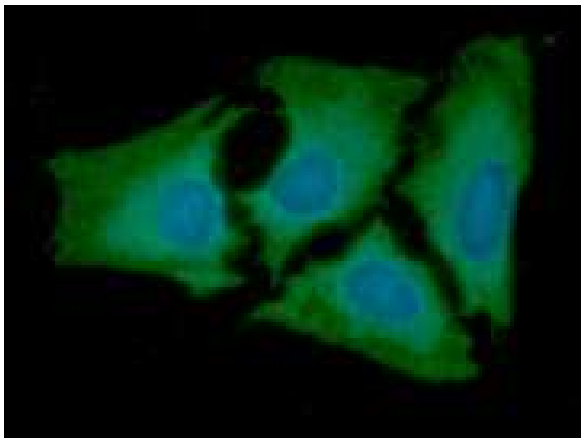
**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**

*Manufactured for:*
Immuno-Biological Laboratories, Inc. (IBL-America)
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA
Phone: (888) 523-1246 Fax.: (763) 780-2988
Email: info@ibl-america.com Web: www.ibl-america.com

# Product information

**ICC/IF analysis**

ICC/IF analysis of AK2 in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human AK2 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).




**General references:** Kim D Pruitt., *et al.* (2012) *Nucleic Acids Res.* **40(Database issue):** D130-D135.

Lagresle-Peyrou C., *et al*. (2009) *Nat Genet.* **41(1):** 106-11.

Lee Y., *et al*. (1998) *J. Biochem.* **123 (1):** 47-54.





*Manufactured for:*
Immuno-Biological Laboratories, Inc. (IBL-America)
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA
Phone: (888) 523-1246 Fax.: (763) 780-2988
Email: info@ibl-america.com Web: www.ibl-america.com