

AK3

Mouse Anti-Human Adenylate Kinase 3 Clone SJB3-36 mAb

Catalog No.	CS115558A CS115558B	Quantity:	50 µl 100 µl
Alternate Names:	AK3L1, AK6, AKL3L, AKL3L1, FIX, adenylate kinase 3 alpha like, adenylate kinase 3 like 1, adenylate kinase 6, adenylate kinase 3 like 1		
Description:	Adenylate kinase (AK; adenosine triphosphate-adenosine monophosphate [ATP-AMP] phospho-transferase, EC 2.7.4.3) is a ubiquitous monomeric enzyme involved energy metabolism of prokaryotic and eukaryotic cells. Three isozymes (AK1, AK2 and AK3) are characterized in vertebrates. AK1 is present in the cytosol of skeletal muscle, brain, and erythrocyte, while AK2 is localized in the intermembrane space of mitochondria of liver, kidney, spleen and heart. AK3, called GTP: AMP phosphotransferase, exists in the mitochondrial matrix of liver and heart. These isozymes contribute to homeostasis of the adenine nucleotide composition in the cell.		
Concentration:	1 mg/ml		
Gene ID:	50808		
Protein Accession No.:	NP_057366		
Host:	Mouse		
Immunogen:	Recombinant human AK3 (adenylate kinase isozyme 3) purified from <i>E. coli</i>		
Isotype:	Mouse IgG1 κ		
Clone:	Anti-human AK3 mAb, clone SJB3-36, is derived from hybridization of mouse SP2/O myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human AK3 protein.		
Formulation:	Liquid. Supplied in Phosphate-Buffered Saline (pH 7.4) with 0.1% Sodium azide. Precaution: Sodium azide is a poisonous and hazardous substance which should be handled by trained staff only.		
Purification:	By protein-G affinity chromatography		
Reacts With:	Human, Mouse		
Applications:	ELISA, WB (Recombinant protein, Cell lysate), Immunohistochemistry		
Application Notes:	The antibody has been tested by ELISA, Western blot and immunohistochemistry analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results. Recommended dilution range for Western blot analysis is 1:500 ~ 1:2,000. Recommended starting dilution is 1:1,000.		



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

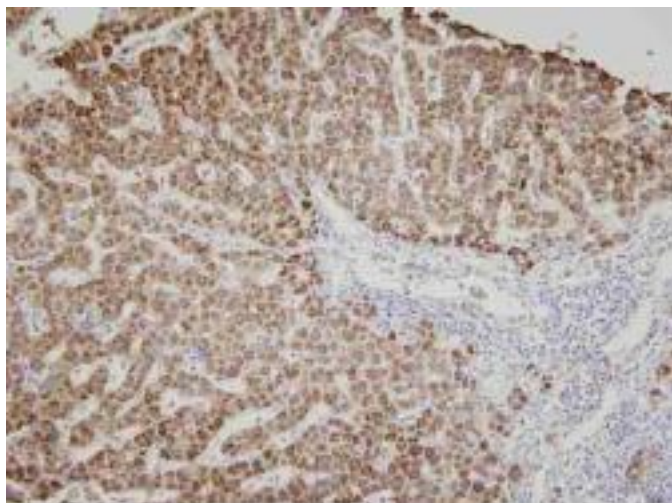
Western Blot Analysis: The recombinant human Ak isozymes (Ak1, Ak2, Ak3) and mouse liver were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-Ak3 antibody (1:1,000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Immunohistochemistry : Human liver tissue was incubated with anti-human Ak3 (1:100) for 2 hours at room temperature. Slide was then washed in PBS, and was incubated in avidin biosystem anti-rabbit labeled polymer for 30 min at RT. Enzyme detection was performed with DAB chromo-gen.

Immunohistochemistry

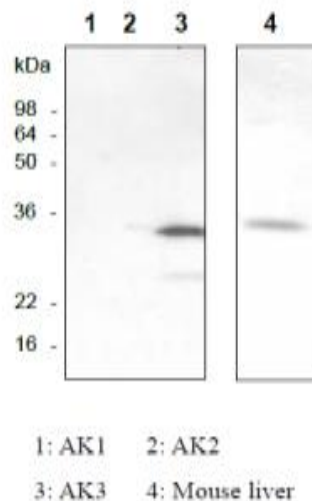
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Western blot analysis

The recombinant human AK isozymes (AK1, AK2, AK3) and mouse liver were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-AK3 antibody (1:1,000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.



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Cell Sciences®
480 Neponset Street
Bldg 12A
Canton, MA 02021

Toll Free: 888-769-1246
Phone: 781-828-0610
Fax: 781-828-0542

E-mail: info@cellsciences.com
Website: www.cellsciences.com