

## Adenylate Kinase 1 polyclonal antibody

Catalog: BS67461	Host: Rabbit	Reactivity: Human, Mouse, Rat, Bovine, Chicken, Dog, Monkey, Pig, Sheep
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### BackGround:

Adenylate kinases 1-5 (designated AK1-5) are a set of enzymes that regulate the phosphorylation state of intracellular adenine nucleotides, which are the principle high-energy phosphoryl-carrying molecules in living cells. AKs influence metabolic signals, which include gene expression, ion channel activity and protein kinase-mediated signaling, by catalyzing phosphoryl transfer between adenine nucleotides (AMP, ADP, ATP). Inherited mutations leading to AK deficiencies in erythrocytes have been implicated in hemolytic anemia. Human AK1 is found in the cytosol of skeletal muscle, brain and erythrocytes and is clustered within myofibrils or bound to membranes. AK1-mediated phosphotransfer is essential for maintaining sufficient cellular energy, which enables proper skeletal muscle performance and metabolic activity.

### Product:

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.

### Molecular Weight:

~ 22 kDa

### Swiss-Prot:

P00568

### Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

### Applications:

WB (1/500 - 1/1000), IHC (1/50 - 1/200), IF/ICC (1/50 - 1/200)

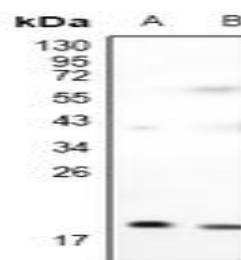
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

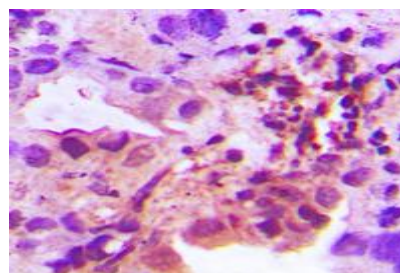
### Specificity:

Recognizes endogenous levels of Adenylate Kinase 1 protein.

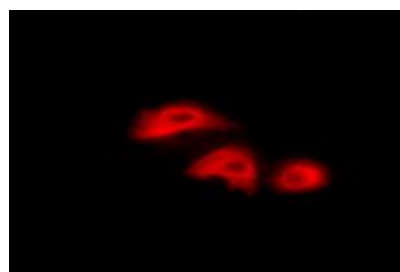
### DATA:



Western blot analysis of Adenylate Kinase 1 expression in A549 (A), A375 (B) whole cell lysates.



Immunohistochemical analysis of Adenylate Kinase 1 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Adenylate Kinase 1 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100

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## PRODUCT DATA SHEET

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in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a Alexa Fluor

594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

**Note:**

For research use only, not for use in diagnostic procedure.

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