For Research Use Only

AK1 Recombinant antibody

Catalog Number:85979-3-RR



Basic Information	Catalog Number: 85979-3-RR	GenBank Accession Number: BC001116	Purification Method: Protein A purification	
	Concentration: 1000 µg/ml	GeneID (NCBI): 203	CloneNo.: 250557D10	
	Source: Rabbit	UNIPROT ID: P00568	Recommended Dilutions: WB: 1:5000-1:50000	
	Isotype: IgG Immunogen Catalog Number: AG6890	Full Name: adenylate kinase 1		
		Calculated MW: 22 kDa		
		Observed MW: 22 kDa		
Applications	Tested Applications: WB. ELISA	Positive	Positive Controls: WB : mouse heart tissue, HeLa cells, K-562 cells, A172 cells, rat heart tissue, human heart tissue	
	Species Specificity: human, mouse, rat			
Background Information	AK1(Adenylate kinase isoenzyme 1), also known as ATP-AMP transphosphorylase 1. It is located in cytoplasm. This protein is highly expressed in skeletal muscle, brain and erythrocytes. Certain mutations in this gene resulting in a functionally inadequate enzyme are associated with a rare genetic disorder causing nonspherocytic hemolytic anemia. Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP 1. Exhibits nucleoside diphosphate kinase activity, catalyzing the production of ATP, CTP, GTP, UTP, dATP, dCTP, dGTP and dTTP from the corresponding diphosphate substrates with either ATP or GTP as phosphate donor 2. Also catalyzes at a very low rate the synthesis of thiamine triphosphate (ThTP) from thiamine diphosphate (ThDP) and ADP. The molecular weight of AK1 is 22 kDa.			
Storage	Storage: Store at -20°C. Stable for one year	- ofter chipmont		

For technical support and original validation data for this product please contact:T: 4006900926E: Proteintech-CN@ptglab.comW: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data

 $\begin{array}{l} 180 \ \mathrm{kDa} {\rightarrow} \\ 140 \ \mathrm{kDa} {\rightarrow} \\ 100 \ \mathrm{kDa} {\rightarrow} \\ 75 \ \mathrm{kDa} {\rightarrow} \end{array}$

 $60 \text{ kDa} \rightarrow 45 \text{ kDa} \rightarrow 35 \text{ kDa} \rightarrow 60 \text{ kDa}$

25 kDa-

15 kDa→ 10 kDa→



Various lysates were subjected to SDS PAGE followed by western blot with 85979-3-RR (AK1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. Biolayer interferometry (BLI) kinetic assays of 85979-3-RR against Human AK1 were performed. The affinity constant is below 1 pM.