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
	Size: 100ul , Concentration: 1000 µg/ml by Nanodrop; Source: Rabbit Isotype: IgG Immunogen Catalog Number: AG6890	GeneID (NCBI): 203	CloneNo.: 250557D10
		UNIPROT ID: P00568	Recommended Dilutions: WB: 1:5000-1:50000
		Full Name: adenylate kinase 1 Calculated MW: 22 kDa	
		Observed MW: 22 kDa	
Applications	Tested Applications: WB, ELISA		Controls: use heart tissue, HeLa cells, K-562 cells, A172
	Species Specificity: human, mouse, rat		cells, rat heart tissue, human heart tissue
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 dTTF 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 after Storage Buffer: PBS with 0.02% sodium azide and 50°		
	Aliquoting is unnecessary for -20°C st		

For technical support and original validation data for this product please contact:T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free
in USA), or 1(312) 455-8498 (outside USA)E: proteintech@ptglab.comW: ptglab.comW: ptglab.com

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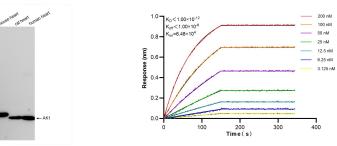
Selected Validation Data

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

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

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.