

For Research Use Only

AK1 Recombinant antibody, PBS Only (Detector)

Catalog Number: 85979-3-PBS



Basic Information

Catalog Number: 85979-3-PBS	GenBank Accession Number: BC001116	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 203	CloneNo.: 250557D10
Source: Rabbit	UNIPROT ID: P00568	
Isotype: IgG	Full Name: adenylate kinase 1	
Immunogen Catalog Number: AG6890	Calculated MW: 22 kDa	
	Observed MW: 22 kDa	

Applications

Tested Applications:
WB, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human, mouse, rat

Product Information

85979-3-PBS targets AK1 as part of a matched antibody pair:

MP02232-2: 85979-5-PBS capture and 85979-3-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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.

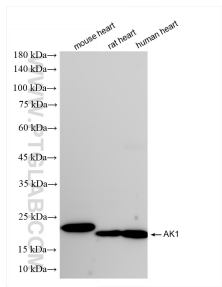
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS only, pH7.3

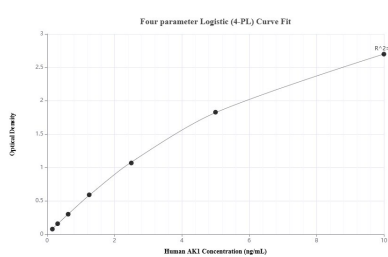
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

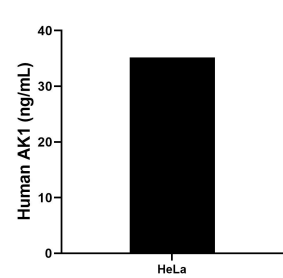
Selected Validation Data



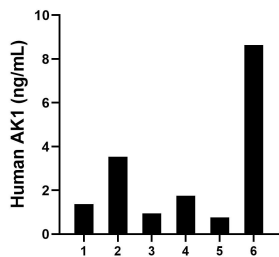
Various lysates were subjected to SDS PAGE followed by western blot with 85979-3-RR (AK1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85979-3-PBS in a different storage buffer formulation.



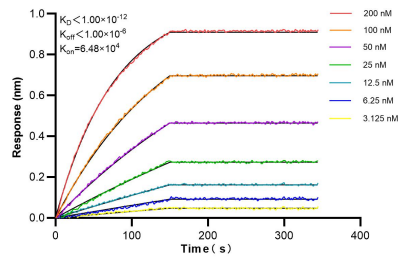
Sandwich ELISA standard curve of MP02232-2, Human AK1 Recombinant Matched Antibody Pair - PBS only. 85979-5-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag6890. 85979-3-PBS was HRP conjugated as the detection antibody. Range: 0.156-10 ng/mL



The mean AK1 concentration was determined to be 35.20 ng/mL in HeLa cell extract based on a 0.9 mg/mL extract load.



Human milk of six individual healthy human donors was measured. The human AK1 concentration of detected samples was determined to be 2.83 ng/mL with a range of 0.76 - 8.63 ng/mL



Biolayer interferometry (BLI) kinetic assays of 85979-3-RR against Human AK1 were performed. The affinity constant is below 1 pM.