

For Research Use Only

AK2 Recombinant antibody, PBS Only (Capture)

Catalog Number: 85406-3-PBS



Basic Information

Catalog Number: 85406-3-PBS	GenBank Accession Number: BC009405	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 204	CloneNo.: 242899H7
Source: Rabbit	UNIPROT ID: P54819	
Isotype: IgG	Full Name: adenylate kinase 2	
Immunogen Catalog Number: AG1464	Calculated MW: 26 kDa	
	Observed MW: 26 kDa	

Applications

Tested Applications:
WB, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human, mouse, rat

Product Information

85406-3-PBS targets AK2 as part of a matched antibody pair:

MP01927-1: 85406-3-PBS capture and 85406-1-PBS detection (validated in Cytometric bead array)

MP01927-3: 85406-3-PBS capture and 85406-2-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

AK2 (Adenylate kinase 2, mitochondrial) is also named as ADK2 and belongs to the adenylate kinase family. It plays a unique role in energy metabolism and energy transfer by regulating the ATP/ADP rate between the cytoplasmic matrix and the mitochondria and it is increased expression during adipocyte and B cell differentiation (PMID:23020757). AK2 catalyzes the reversible transfer of a phosphoryl group from ATP to AMP (PMID:19043417). Defects in AK2 are the cause of reticular dysgenesis (RDYS) (PMID:19043416). It has 6 isoforms produced by alternative splicing.

Storage

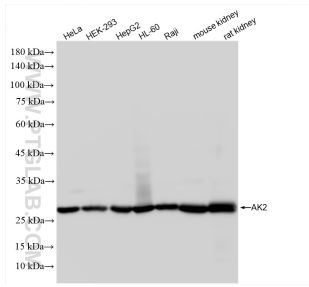
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

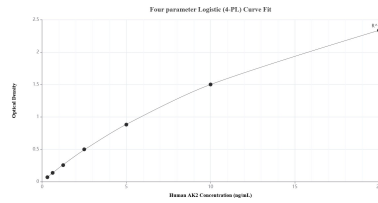
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

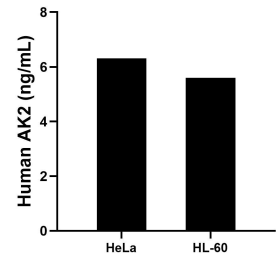
Selected Validation Data



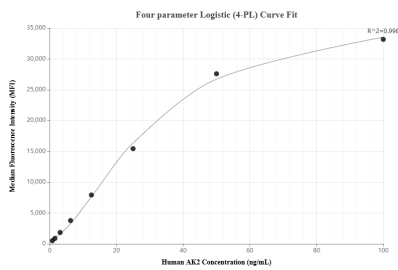
Various lysates were subjected to SDS PAGE followed by western blot with 85406-3-RR (AK2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85406-3-PBS in a different storage buffer formulation.



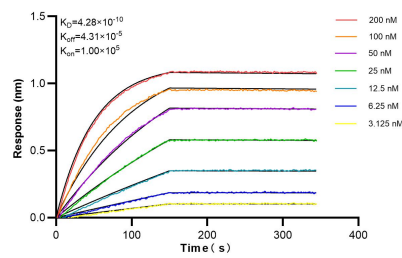
Sandwich ELISA standard curve of MP01927-3, Human AK2 Recombinant Matched Antibody Pair - PBS only. 85406-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag1464. 85406-2-PBS was HRP conjugated as the detection antibody. Range: 0.313-20 ng/mL.



The mean AK2 concentration was determined to be 6.31 ng/mL in HeLa cell extract based on a 2.10 mg/mL extract load and 5.60 ng/mL in HL-60 cell extract based on a 1.50 mg/mL extract load.



Cytometric bead array standard curve of MP01927-1, AK2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 85406-3-PBS. Detection antibody: 85406-1-PBS. Standard: Ag1464. Range: 0.781-100 ng/mL.



Bilayer interferometry (BLI) kinetic assays of 85406-3-RR against Human AK2 were performed. The affinity constant is 0.428 nM.