

For Research Use Only

AK2 Polyclonal antibody

Catalog Number: 11014-1-AP **3 Publications**



Basic Information

Catalog Number:

11014-1-AP

Size:

150UL, Concentration: 213 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1464

GenBank Accession Number:

BC009405

GeneID (NCBI):

204

Full Name:

adenylate kinase 2

Calculated MW:

26 kDa

Observed MW:

26 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:4000

IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB

IHC 1:50-1:500

IF 1:20-1:200

Applications

Tested Applications:

IF, IHC, IP, WB, ELISA

Cited Applications:

IHC, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, zebrafish

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HL-60 cells, Raji cells, HEK-293 cells, HeLa cells, HepG2 cells, mouse kidney tissue, mouse liver tissue, rat kidney tissue, rat liver tissue

IP: mouse liver tissue,

IHC: human pancreas cancer tissue,

IF: A549 cells,

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 cytoplasm 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Nathalie Escande-Beillard	32330411	Neuron	WB
Fustin Jean-Michel JM	22832226	Cell Rep	WB
Pannicke Ulrich U	19043417	Nat Genet	IHC

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.1% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

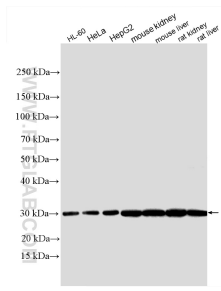
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

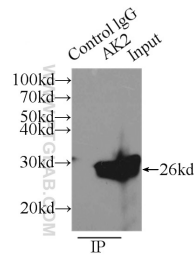
E: proteintech@ptglab.com
W: ptglab.com

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

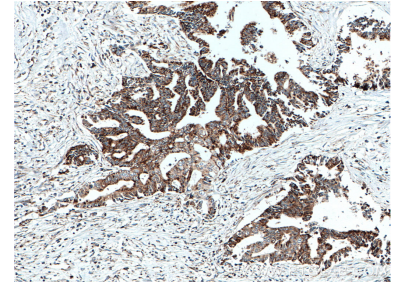
Selected Validation Data



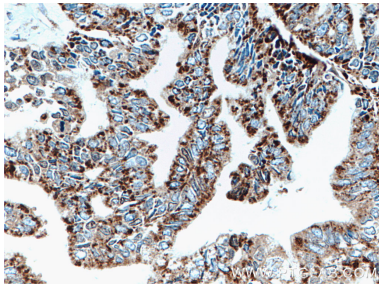
Various lysates were subjected to SDS PAGE followed by western blot with 11014-1-AP (AK2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



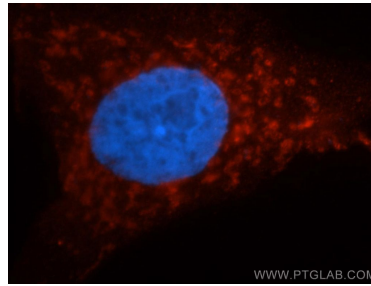
IP Result of anti-AK2 (IP:11014-1-AP, 3ug; Detection:11014-1-AP 1:800) with mouse liver tissue lysate 12500ug.



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 11014-1-AP (AK2 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 11014-1-AP (AK2 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of A549 cells, using AK2 antibody 11014-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).