

For Research Use Only

AK2 Polyclonal antibody

Catalog Number: 11014-1-AP

11 Publications



Basic Information

Catalog Number:

11014-1-AP

Size:

150ul, Concentration: 1300 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1464

GenBank Accession Number:

BC009405

GeneID (NCBI):

204

UNIPROT ID:

P54819

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 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF

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, 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/ICC: HepG2 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 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Nasrinsadat Nabavizadeh	36652330	EMBO Mol Med	WB
Yinhuan Zhang	36615221	Molecules	WB
Nathalie Escande-Beillard	32330411	Neuron	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

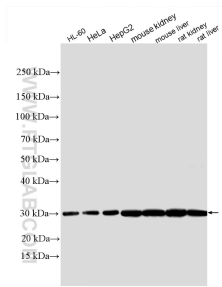
For technical support and original validation data for this product please contact:

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

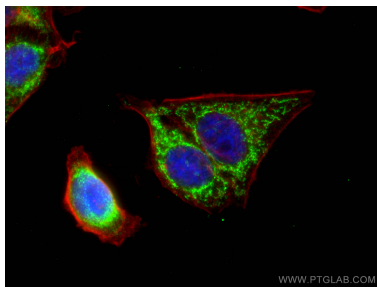
E: proteintech@ptglab.com
W: ptglab.com

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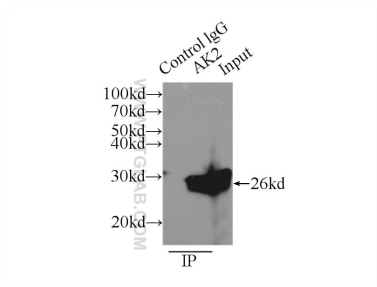
Selected Validation Data



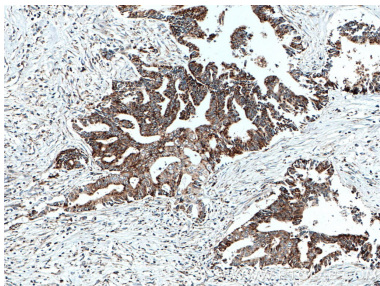
Various lysates were subjected to SDS PAGE followed by western blot with 11014-1-AP (AK2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



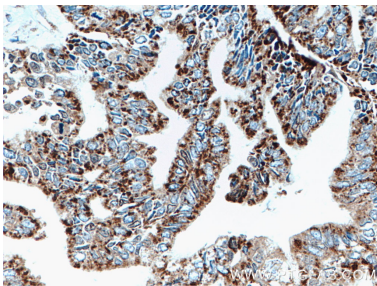
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using AK2 antibody (11014-1-AP) at dilution of 1:200 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



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).