

# AK2 Polyclonal antibody

Catalog Number: 11014-1-AP

9 Publications

## Basic Information

**Catalog Number:**

11014-1-AP

**Size:**

1300 µg/ml

**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 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:50-1:500

## Applications

**Tested Applications:**

IF/ICC, IHC, IP, WB, ELISA

**Cited Applications:**

IF, 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, 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:** 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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

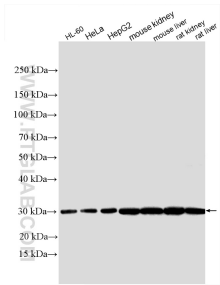
For technical support and original validation data for this product please contact:

T: 4006900926

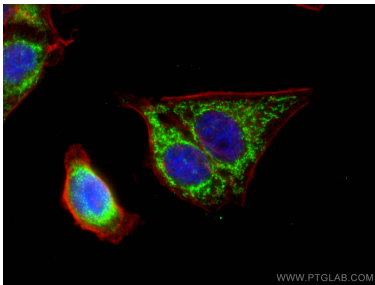
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

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

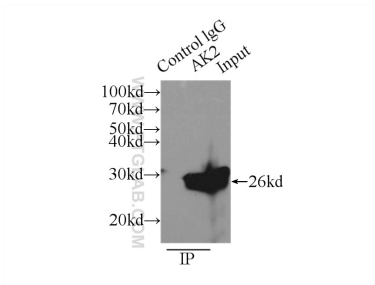
Selected Validation Data



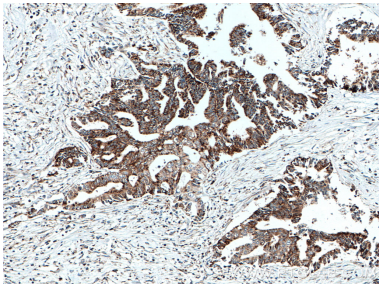
Various lysates were subjected to SDS PAGE followed by western blot with 11014-1-AP (AK2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



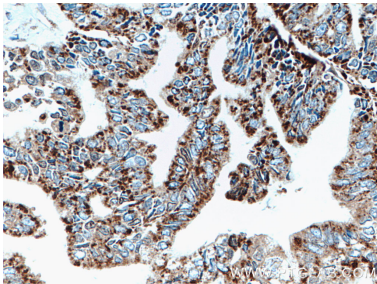
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using AK2 antibody (11014-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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).