

AK2 Monoclonal antibody

Catalog Number: 66127-1-Ig

Featured Product

Basic Information

Catalog Number:

66127-1-Ig

Size:

2500 µg/ml

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG17911

GenBank Accession Number:

BC009405

GeneID (NCBI):

204

UNIPROT ID:

P54819

Full Name:

adenylate kinase 2

Calculated MW:

26 kDa

Observed MW:

29 kDa

Purification Method:

Protein A purification

CloneNo.:

3H2C10

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:20-1:200

IF 1:20-1:200

Applications

Tested Applications:

FC, IF/ICC, IHC, WB, ELISA

Species Specificity:

human, rat, mouse

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 : HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells, HSC-T6 cells, PC-12 cells, NIH/3T3 cells, 4T1 cells

IHC : human liver tissue, human heart tissue

IF : HepG2 cells, HeLa 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.

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

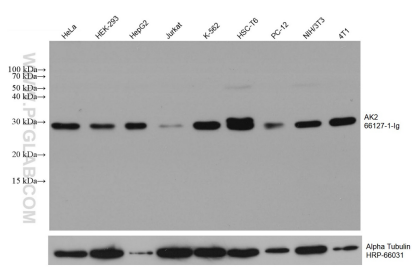
For technical support and original validation data for this product please contact:

T: 4006900926

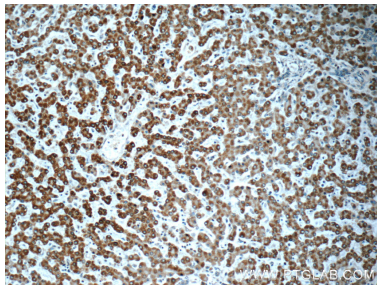
E: Proteintech-CN@ptglab.comW: ptgcn.com

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

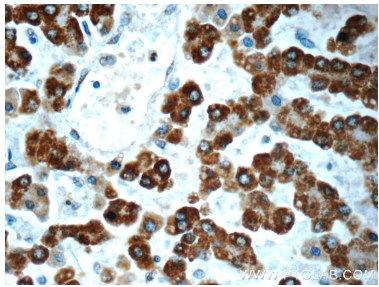
Selected Validation Data



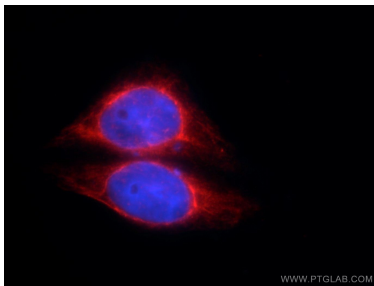
Various lysates were subjected to SDS PAGE followed by western blot with 66127-1-Ig (AK2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



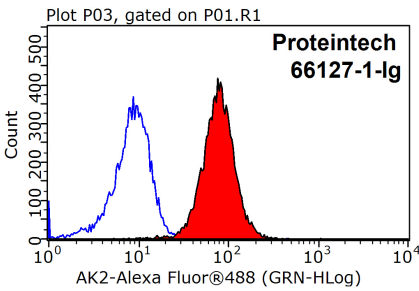
Immunohistochemical analysis of paraffin-embedded human liver slide using 66127-1-Ig (AK2 Antibody) at dilution of 1:50.



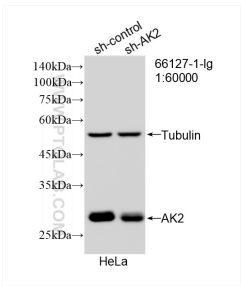
Immunohistochemical analysis of paraffin-embedded human liver slide using 66127-1-Ig (AK2 Antibody) at dilution of 1:50.



Immunofluorescent analysis of HepG2 cells using 66127-1-Ig (AK2 antibody) at dilution of 1:50 and Rhodamine-Goat anti-Mouse IgG.



1X10⁶ HepG2 cells were stained with .2ug AK2 antibody (66127-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L) with dilution 1:1000.



WB result of AK2 antibody (66127-1-Ig; 1:60000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AK2 transfected HeLa cells.