

AK2 Monoclonal antibody

Catalog Number: 66127-1-Ig

Featured Product

Basic Information

Catalog Number: 66127-1-Ig	GenBank Accession Number: BC009405	Purification Method: Protein A purification
Size: 150ul , Concentration: 2500 µg/ml by 204 Nanodrop and 1800 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 204	CloneNo.: 3H2C10
Source: Mouse	Full Name: adenylate kinase 2	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:20-1:200 IF 1:20-1:200
Isotype: IgG2a	Calculated MW: 26 kDa	
Immunogen Catalog Number: AG17911	Observed MW: 29 kDa	

Applications

Tested Applications: FC, IF, IHC, WB, ELISA	Positive Controls:
Species Specificity: human, rat, mouse	WB : HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells, HSC-T6 cells, PC-12 cells, NIH/3T3 cells, 4T1 cells
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	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 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.

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.

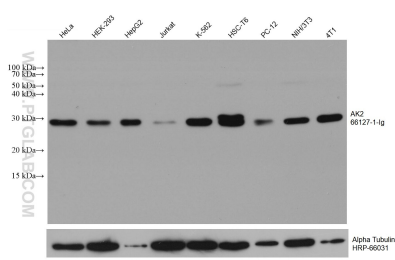
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

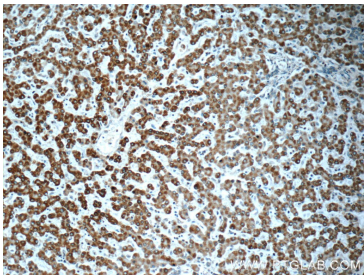
For technical support and original validation data for this product please contact:
 T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
 E: proteintech@ptglab.com
 W: ptglab.com

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

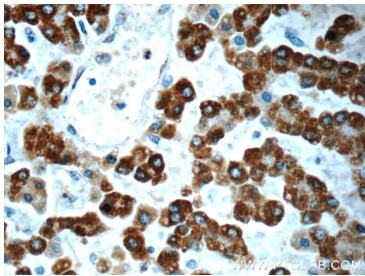
Selected Validation Data



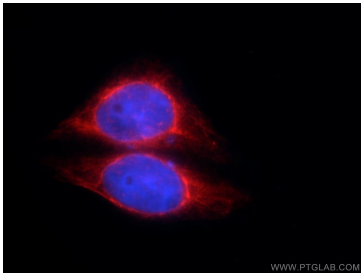
Various lysates were subjected to SDS PAGE followed by western blot with 66127-1-Ig (AK2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



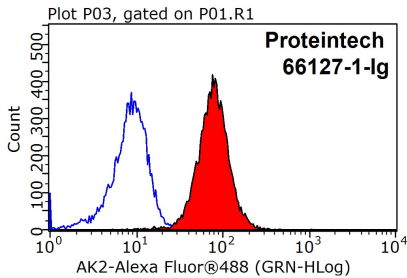
Immunohistochemical analysis of paraffin-embedded human liver slide using 66127-1-Ig (AK2 Antibody) at dilution of 1:50.



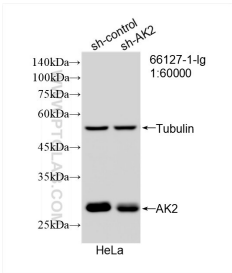
Immunohistochemical analysis of paraffin-embedded human liver slide using 66127-1-Ig (AK2 Antibody) at dilution of 1:50.



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.