

For Research Use Only

# AK2 Monoclonal antibody, PBS Only (Capture)

Catalog Number: 66127-1-PBS

Featured Product



## Basic Information

### Catalog Number:

66127-1-PBS

### Size:

100ug, Concentration: 1mg/ml by Nanodrop;

### 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

## Applications

### Tested Applications:

WB, IHC, IF/ICC, Cytometric bead array, Indirect ELISA

### Species Specificity:

human, mouse, rat

## Product Information

66127-1-PBS targets AK2 as part of a matched antibody pair:

MP50407-1: 66127-1-PBS capture and 66127-2-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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 -80°C.

### Storage Buffer:

PBS only

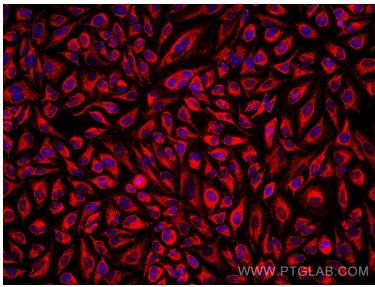
For technical support and original validation data for this product please contact:

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

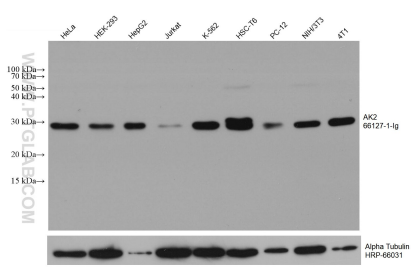
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

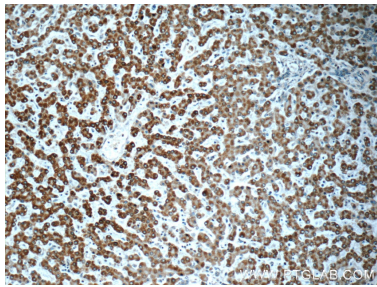
Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using AK2 antibody (66127-1-Ig, Clone: 3H2C10) at dilution of 1:5024 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



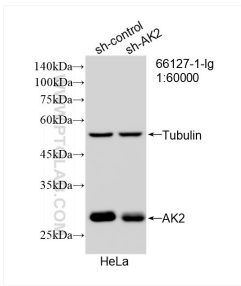
Various lysates were subjected to SDS PAGE followed by western blot with 66127-1-Ig (AK2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control. This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



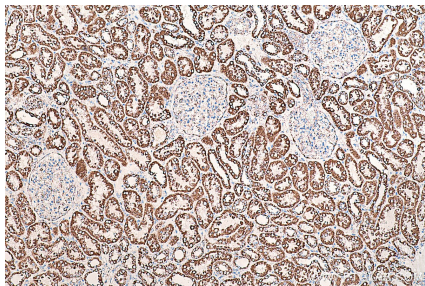
Immunohistochemical analysis of paraffin-embedded human liver slide using 66127-1-Ig (AK2 Antibody) at dilution of 1:50. This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



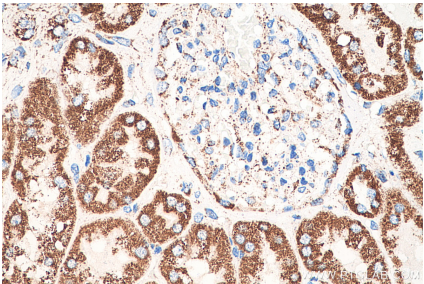
Immunofluorescent analysis of HepG2 cells using 66127-1-Ig (AK2 antibody) at dilution of 1:50 and Rhodamine-Goat anti-Mouse IgG. This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



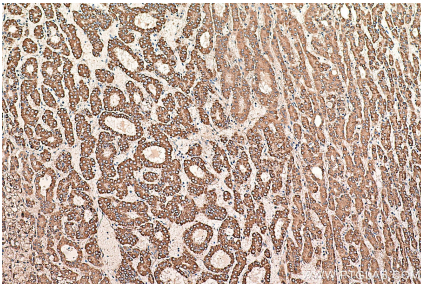
WB result of AK2 antibody (66127-1-Ig; 1:60000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AK2 transfected HeLa cells. This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



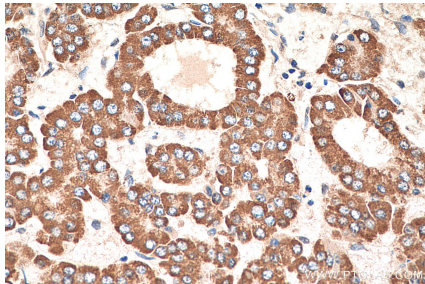
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



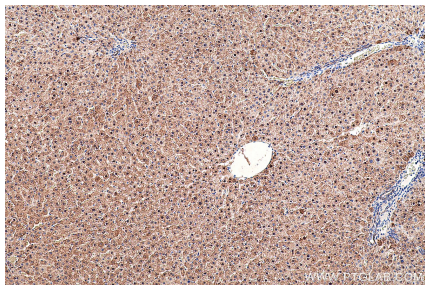
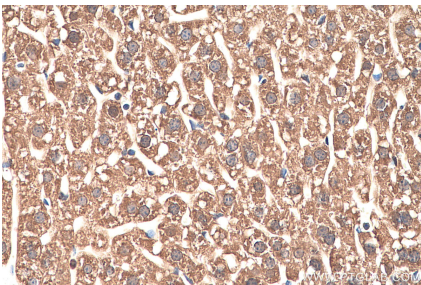
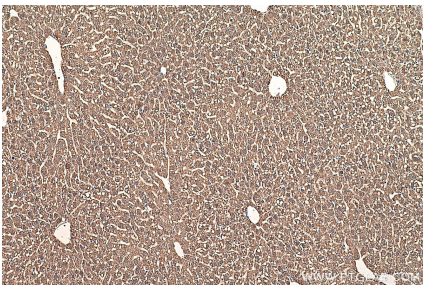
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.

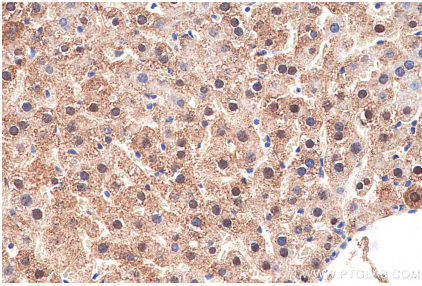


Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.

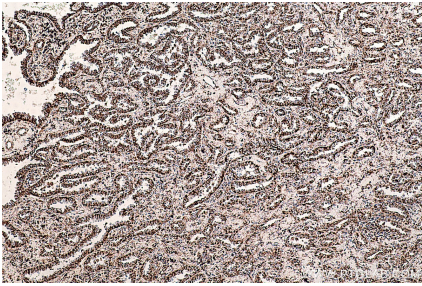




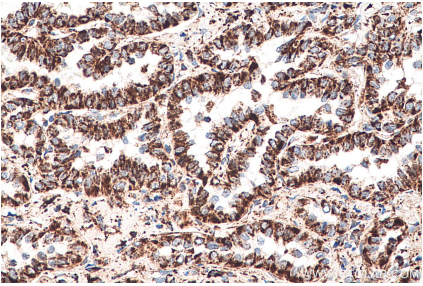
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



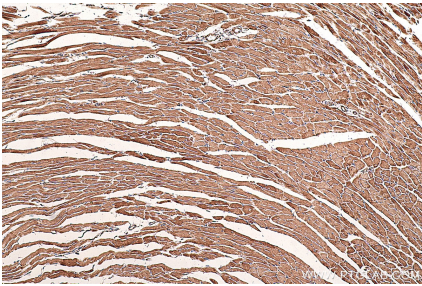
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



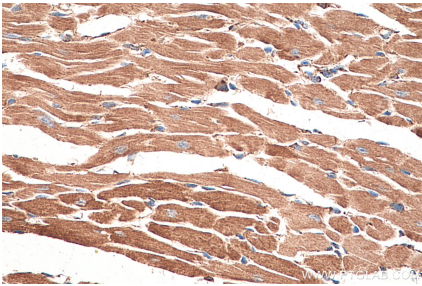
Immunohistochemical analysis of paraffin-embedded rat liver tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



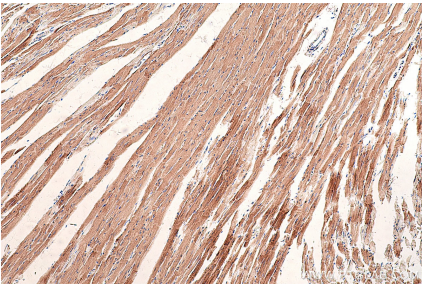
Immunohistochemical analysis of paraffin-embedded rat liver tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



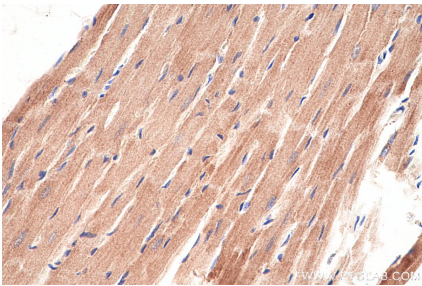
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



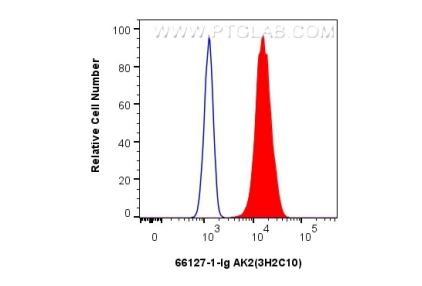
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



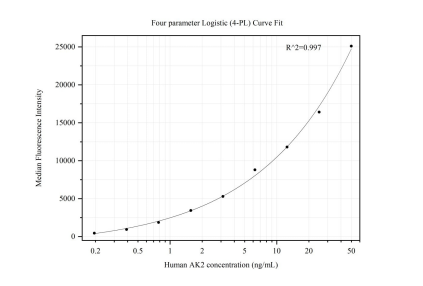
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded rat heart tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded rat heart tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



1x10<sup>6</sup> HepG2 cells were intracellularly stained with 0.25 ug AK2 Monoclonal antibody (66127-1-Ig, Clone:3H2C10) and Coralite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1)(red), or 0.25 ug Mouse IgG2a isotype control Mouse McAb (66360-2-Ig, Clone: 11A1B2) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 66127-1-PBS in a



Cytometric bead array standard curve of MP50407-1, AK2 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66127-1-PBS. Detection antibody: 66127-2-PBS. Standard:Ag17911. Range: 0.195-50 ng/mL.

