## For Research Use Only

## AK2 Monoclonal antibody, PBS Only (Capture)



**Purification Method:** 

CloneNo.:

3H2C10

Protein A purification

Catalog Number: 66127-1-PBS

**Featured Product** 

**Basic Information** 

Catalog Number: GenBank Accession Number:

66127-1-PBS BC009405

Size: GeneID (NCBI):

100ug, Concentration: 1mg/ml by 204
Nanodrop:

Nanodrop; UNIPROT ID:
Source: P54819
Mouse Full Name:

 Isotype:
 adenylate kinase 2

 IgG2a
 Calculated MW:

 Immunogen Catalog Number:
 26 kDa

AG17911 Observed MW:

29 kDa

**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.

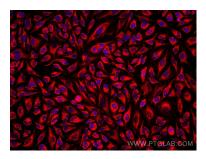
**Background Information** 

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 cytoplasma 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.

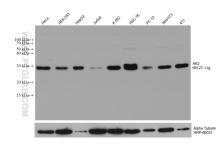
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

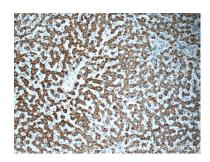
## Selected Validation Data



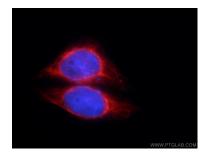
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using AK2 antibody (66127-1-1g, Clone: 3H2C10) at dilution of 1:5024 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004). This data was developed using the same antibody clone with 66127-1-PBS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



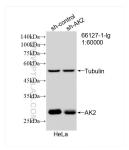
Various lysates were subjected to SDS PAGE followed by western blot with 66127-1-lg (AK2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control. This data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



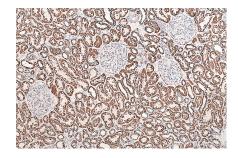
Immunohistochemical analysis of paraffinembedded human liver slide using 66127-1-lg (AK2 Antibody) at dilution of 1:50. This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



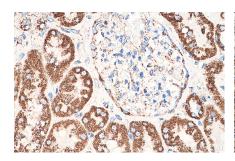
Immunofluorescent analysis of HepG2 cells using 66127-1-Ig (AK2 antibody) at dilution of 1:50 and Rhodamine-Goat anti-Mouse IgG. This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



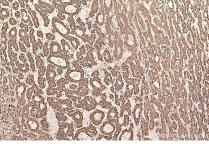
WB result of AK2 antibody (66127-1-lg; 1:60000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AK2 transfected HeLa cells. This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.



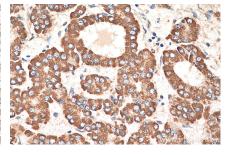
Immunohistochemical analysis of paraffinembedded human kidney tissue slide using 66127-1-lg (AK2 antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage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



Immunohistochemical analysis of paraffinembedded 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.

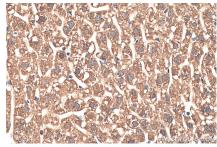


Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66127-1-lg (AK2 antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different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



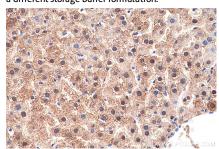
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66127-1-lg (AK2 antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different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





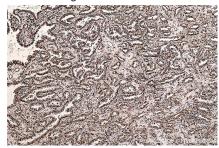


Immunohistochemical analysis of paraffinembedded mouse liver tissue slide using 66127-1-  $\lg$  (AK2 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different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



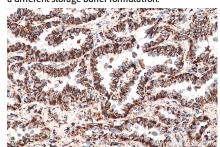
Immunohistochemical analysis of paraffinembedded rat liver tissue slide using 66127-1-lg (Al(2 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage buffer formulation.

Immunohistochemical analysis of paraffinembedded 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 paraffinembedded human lung cancer tissue slide using 66127-1-lg (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 paraffinembedded rat liver tissue slide using 66127-1-lg (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 paraffinembedded human lung cancer tissue slide using 66127-1-lg (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.



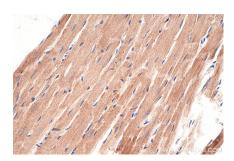
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage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



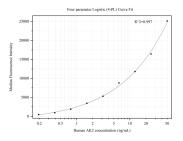
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 66127-1-Ig (AK2 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66127-1-PBS in a different storage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



Immunohistochemical analysis of paraffinembedded rat heart tissue slide using 66127-1-lg (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 paraffinembedded rat heart tissue slide using 66127-1-lg (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.



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