

# Pan-Akt Rabbit pAb

Catalog No.: A18120 **30 Publications**

## Basic Information

**Observed MW**

60kDa

**Calculated MW**

48kDa/55kDa/51kDa/54kDa

**Category**

Primary antibody

**Applications**

WB, IHC-P, IF/ICC, IP, ELISA

**Cross-Reactivity**

Human, Mouse, Rat

## Background

Human AKT serine-threonine protein kinase family includes three members AKT1, AKT2, AKT3, which are also often referred to as protein kinase B alpha, beta, and gamma. These highly similar AKT proteins all have an N-terminal pleckstrin homology domain, a serine/threonine-specific kinase domain and a C-terminal regulatory domain. These proteins are phosphorylated by phosphoinositide 3-kinase (PI3K). AKT/PI3K forms a key component of many signalling pathways that involve the binding of membrane-bound ligands such as receptor tyrosine kinases, G-protein coupled receptors, and integrin-linked kinase. These AKT proteins therefore regulate a wide variety of cellular functions including cell proliferation, survival, metabolism, and angiogenesis in both normal and malignant cells. AKT proteins are recruited to the cell membrane by phosphatidylinositol 3,4,5-trisphosphate (PIP3) after phosphorylation of phosphatidylinositol 4,5-bisphosphate (PIP2) by PI3K. Subsequent phosphorylation of both threonine residue 308 and serine residue 473 is required for full activation of the AKT1 protein encoded by this gene.

## Recommended Dilutions

**WB** 1:500 - 1:1000**IHC-P** 1:50 - 1:200**IF/ICC** 1:50 - 1:100**IP** 0.5µg-4µg antibody for  
400µg-600µg extracts of  
whole cells**ELISA** Recommended starting  
concentration is 1 µg/mL.  
Please optimize the  
concentration based on  
your specific assay  
requirements.

## Immunogen Information

**Gene ID**

207/208/10000

**Swiss Prot**

P31749/P31751/Q9Y243

**Immunogen**

Recombinant fusion protein containing a sequence corresponding to amino acids 311-480 of human AKT1/AKT2/AKT3 (NP\_005154.2).

**Synonyms**

AKT1/AKT2/AKT3; Pan-Akt

## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

Affinity purification

**Storage**

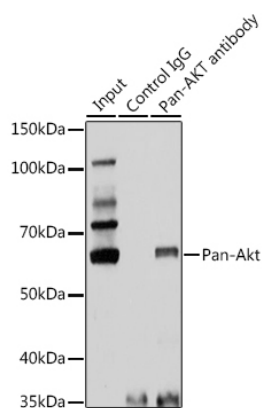
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300, 50% glycerol, pH7.3.

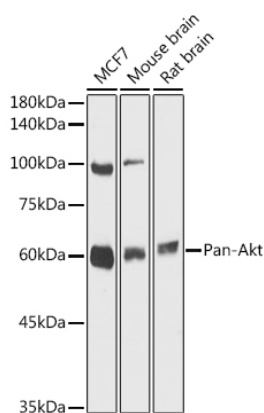
## Contact

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

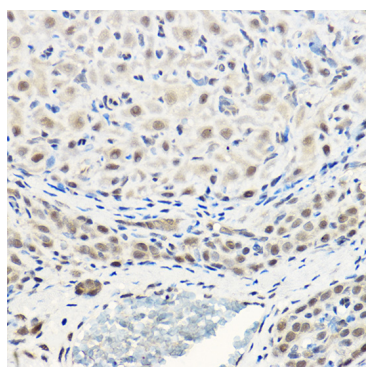
## Validation Data



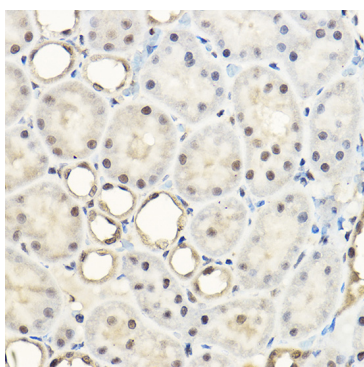
Immunoprecipitation analysis of 25 µg extracts of Rat brain cells using 3 µg Pan-Akt antibody (A18120). Western blot was performed from the immunoprecipitate using Pan-Akt antibody (A18120) at a dilution of 1:1000.



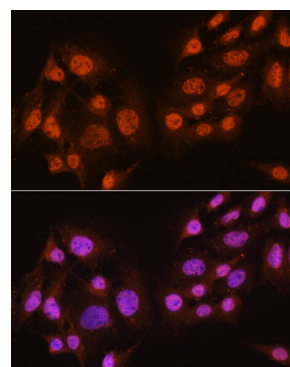
Western blot analysis of various lysates using Pan-Akt Rabbit pAb (A18120) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.



Immunohistochemistry analysis of paraffin-embedded Rat ovary using Pan-Akt Rabbit pAb (A18120) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



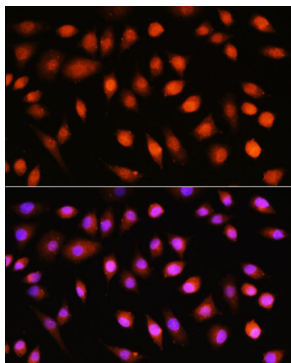
Immunohistochemistry analysis of paraffin-embedded Rat kidney using Pan-Akt Rabbit pAb (A18120) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



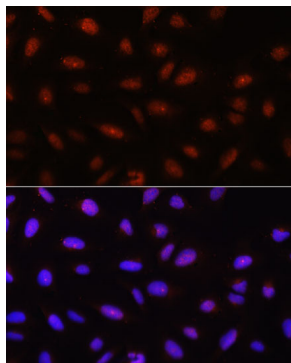
Immunofluorescence analysis of C6 cells using Pan-Akt Rabbit pAb (A18120) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

## Validation Data

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Immunofluorescence analysis of L929 cells using Pan-Akt Rabbit pAb (A18120) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using Pan-Akt Rabbit pAb (A18120) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.