

A18120

Leader in Biomolecular Solutions for Life Science



## Pan-Akt Rabbit pAb

Catalog No.: A18120

19 Publications

### Basic Information

#### Observed MW

60kDa

#### Calculated MW

48kDa/55kDa/51kDa/54kDa

#### Category

Polyclonal 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

### 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

### Contact



[www.abclonal.com](http://www.abclonal.com)

### Product Information

#### Source

Rabbit

#### Isotype

IgG

#### Purification

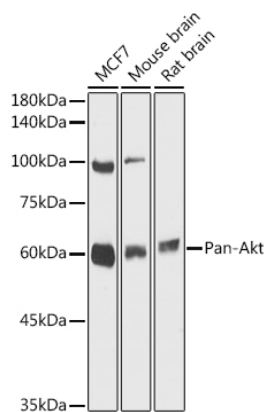
Affinity purification

#### Storage

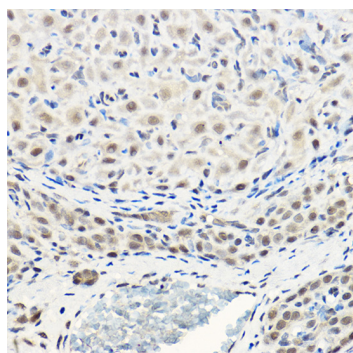
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

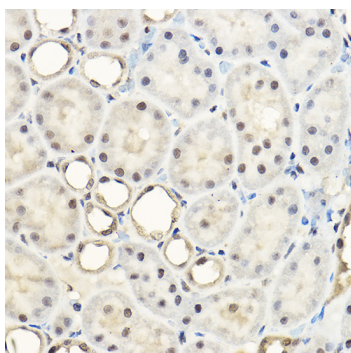
## Validation Data



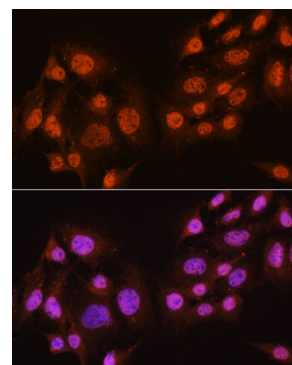
Western blot analysis of various lysates using Pan-Akt Rabbit pAb (A18120) at 1:1000 dilution.  
 Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
 Lysates/proteins: 25µg per lane.  
 Blocking buffer: 3% nonfat dry milk in TBST.  
 Detection: ECL Basic Kit (RM00020).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



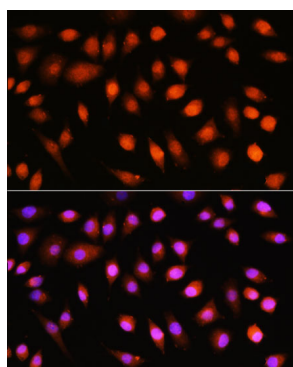
Immunohistochemistry analysis of Pan-Akt in paraffin-embedded rat ovary using Pan-Akt Rabbit pAb (A18120) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



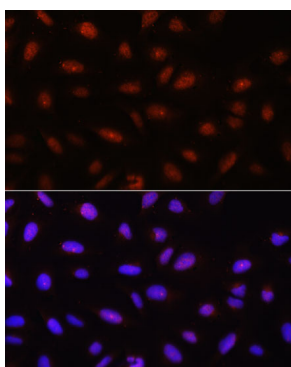
Immunohistochemistry analysis of Pan-Akt in paraffin-embedded rat kidney using Pan-Akt Rabbit pAb (A18120) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



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

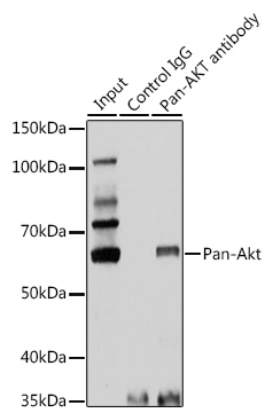


Immunofluorescence analysis of L929 cells using Pan-Akt Rabbit pAb (A18120) at dilution of 1:100. Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



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

## 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.