

A18120

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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

Contact

 www.abclonal.com

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

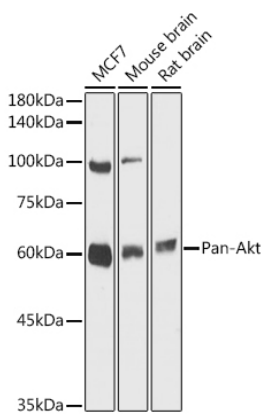
Affinity purification

Storage

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

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

Validation Data



Western blot analysis of various lysates using Pan-Akt Rabbit pAb (A18120) at 1:1000 dilution.

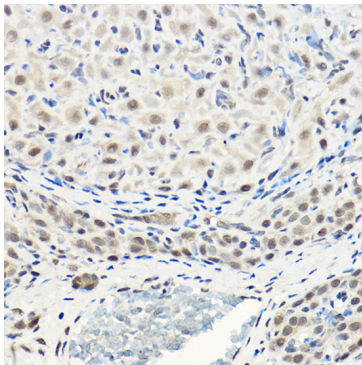
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

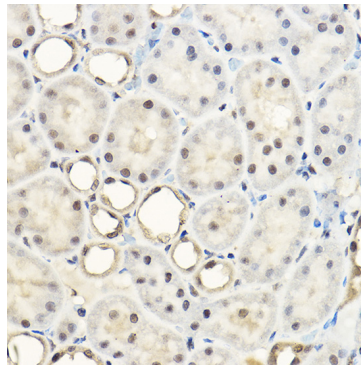
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

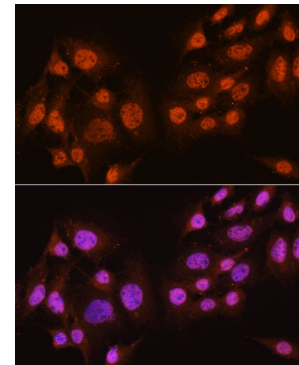
Exposure time: 30s.



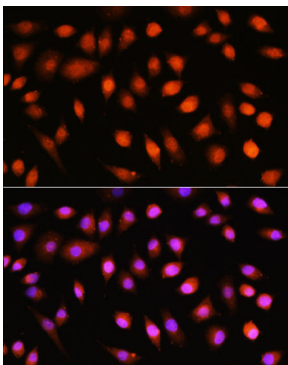
Immunohistochemistry analysis of paraffin-embedded rat ovary using Pan-Akt Rabbit pAb (A18120) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



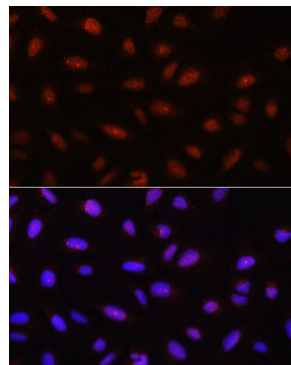
Immunohistochemistry analysis of paraffin-embedded rat kidney using Pan-Akt Rabbit pAb (A18120) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



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.

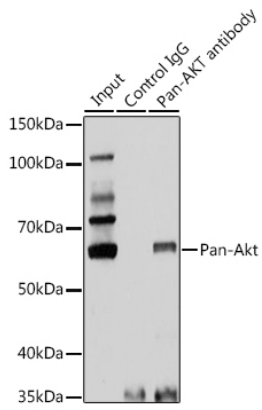


Immunofluorescence analysis of L929 cells using Pan-Akt Rabbit pAb (A18120) at dilution of 1:100. Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



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