

Pan-Akt Rabbit mAb

Catalog No.: A18675

Recombinant

16 Publications

Basic Information

Observed MW

60kDa

Calculated MW

56kDa

Category

Primary antibody

Applications

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

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC5005-05

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	1:2000 - 1:12000
IHC-P	1:200 - 1:800
IF/ICC	1:100 - 1:400
IP	0.5µg-4µg antibody for 200µg-400µg extracts of whole cells
ELISA	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Contact

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Immunogen Information

Gene ID

207/ 208/ 10000

Swiss Prot

P31749/P31751/Q9Y243

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-123 of human Pan-Akt (NP_005154.2).

Synonyms

AKT; PKB; RAC; PRKBA; PKB-ALPHA; RAC-ALPHA

Product Information

Source

Rabbit

Isotype

IgG

Purification

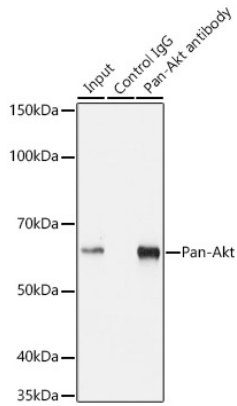
Affinity purification

Storage

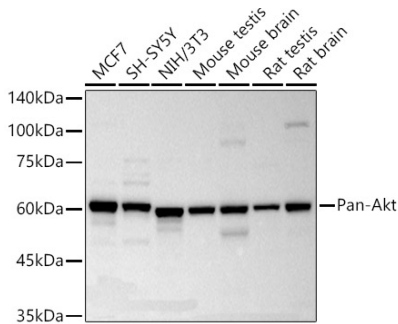
Store at -20°C. Avoid freeze / thaw cycles.

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

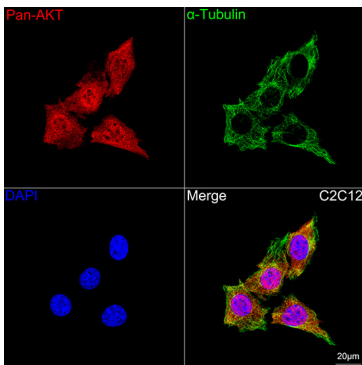
Validation Data



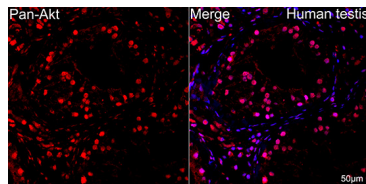
Immunoprecipitation analysis of 200 µg extracts from MCF7 cells using 3 µg Pan-Akt Rabbit mAb (A18675). Western blot was performed from the immunoprecipitate using Pan-Akt Rabbit mAb (A18675) at a dilution of 1:1000.



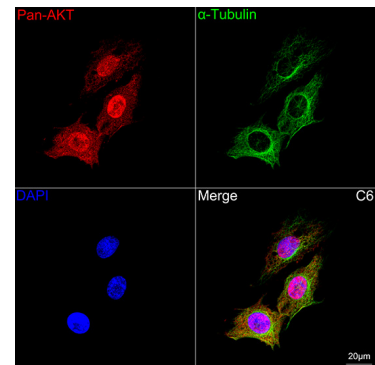
Western blot analysis of various lysates using Pan-Akt Rabbit mAb (A18675) at 1:2000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 10s.



Confocal imaging of C2C12 cells using Pan-Akt Rabbit mAb (A18675, dilution 1:100) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

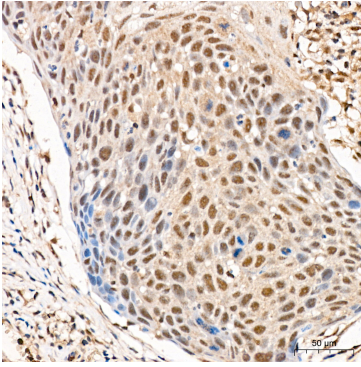


Confocal imaging of paraffin-embedded Human testis tissue using Pan-Akt Rabbit mAb (A18675, dilution 1:100) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.

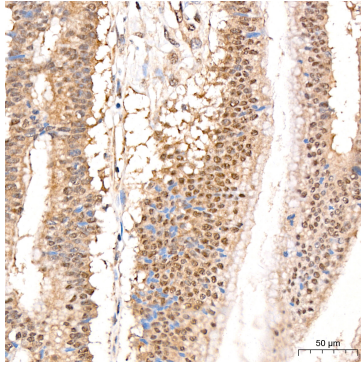


Confocal imaging of C6 cells using Pan-Akt Rabbit mAb (A18675, dilution 1:100) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

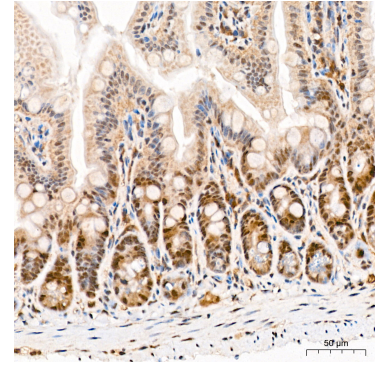
Validation Data



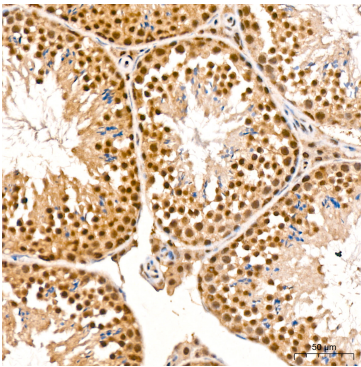
Immunohistochemistry analysis of paraffin-embedded Human cervix cancer tissue using Pan-Akt Rabbit mAb (A18675) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



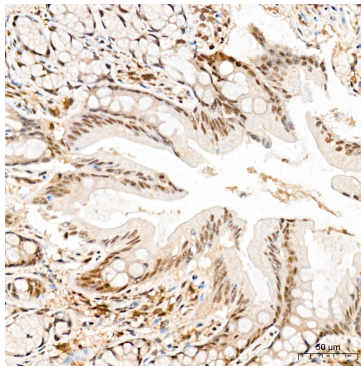
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using Pan-Akt Rabbit mAb (A18675) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse intestin tissue using Pan-Akt Rabbit mAb (A18675) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse testis tissue using Pan-Akt Rabbit mAb (A18675) at a dilution of 1:200 (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 colon tissue using Pan-Akt Rabbit mAb (A18675) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.