A18675

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Pan-Akt Rabbit mAb

Catalog No.: A18675 Recombinant 12 Publications

Basic Information

Observed MW
60kDa

Calculated MW

Category
SMab Recombinant Monoclonal 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 - 1:10000
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200
IP	0.5μg-4μg antibody for 200μg-400μg 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 1-123 of human Pan-Akt (NP_005154.2).

Synonyms

Contact

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Product Information

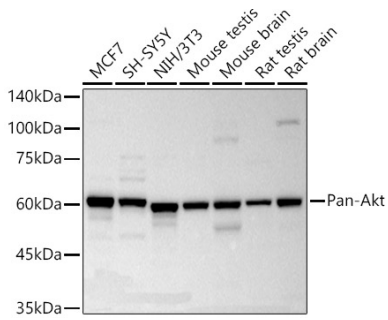
Source
Rabbit

Isotype
IgG

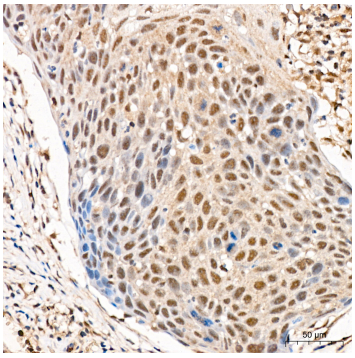
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.01% thimerosal,0.05% BSA,50% glycerol,pH7.3.

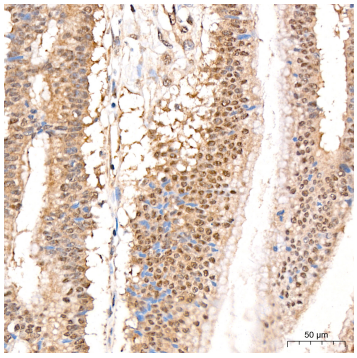
Validation Data



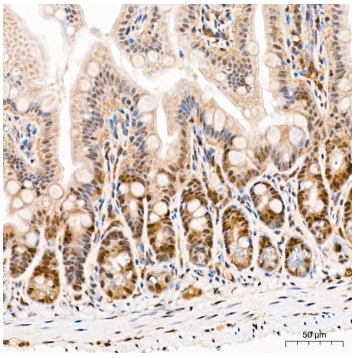
Western blot analysis of various lysates using Pan-Akt Rabbit mAb (A18675) at1:2000 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 10s.



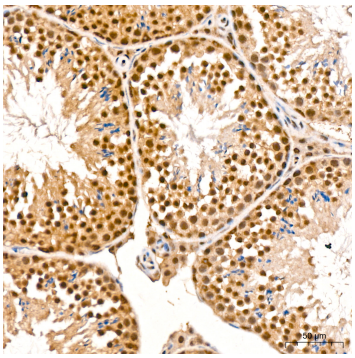
Immunohistochemistry analysis of Pan-Akt in paraffin-embedded human cervix cancer tissue using Pan-Akt Rabbit mAb (A18675) at a dilution of 1:200 (40x lens).High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



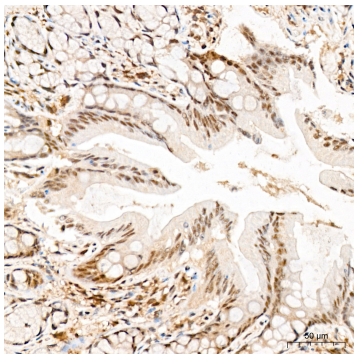
Immunohistochemistry analysis of Pan-Akt in paraffin-embedded human colon carcinoma tissue using Pan-Akt Rabbit mAb (A18675) at a dilution of 1:200 (40x lens).High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



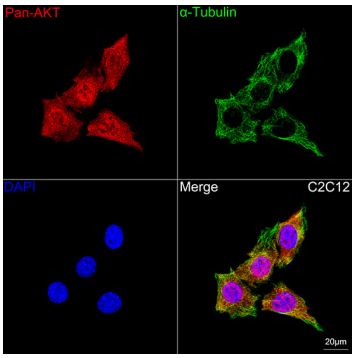
Immunohistochemistry analysis of Pan-Akt in paraffin-embedded mouse intestin tissue using Pan-Akt Rabbit mAb (A18675) at a dilution of 1:200 (40x lens).High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



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

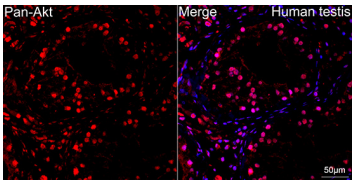


Immunohistochemistry analysis of Pan-Akt in paraffin-embedded rat colon tissue using Pan-Akt Rabbit mAb (A18675) at a dilution of 1:200 (40x lens).High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.

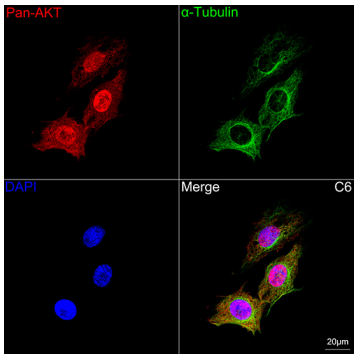


Confocal immunofluorescence analysis of C2C12 cells using Pan-Akt Rabbit mAb (A18675, dilution 1:100) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with Alpha-tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation 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.

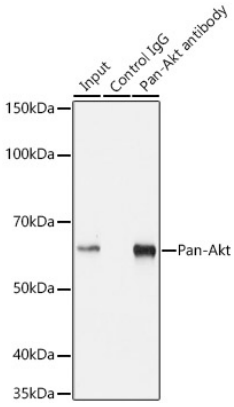
Validation Data



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 immunofluorescence analysis 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 Alpha-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.



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.