AKT1 Rabbit mAb

Catalog No: #48884

Package Size: #48884-1 50ul #48884-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

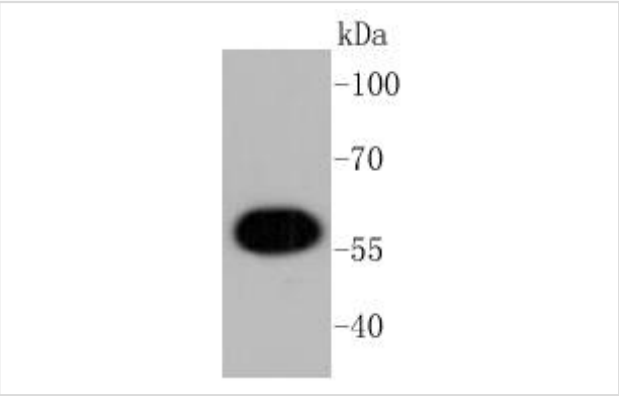
Description

Product Name	AKT1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	ST48-09
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	AKT 1 antibody AKT antibody AKT1 antibody AKT1_HUMAN antibody MGC99656 antibody PKB antibody PKB-ALPHA antibody PRKBA antibody Protein Kinase B Alpha antibody Protein kinase B antibody Proto-oncogene c-Akt antibody RAC Alpha antibody RAC antibody RAC-alpha serine/threonine-protein kinase antibody RAC-PK-alpha antibody
Accession No.	Swiss-Prot#:P31749
Calculated MW	56 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

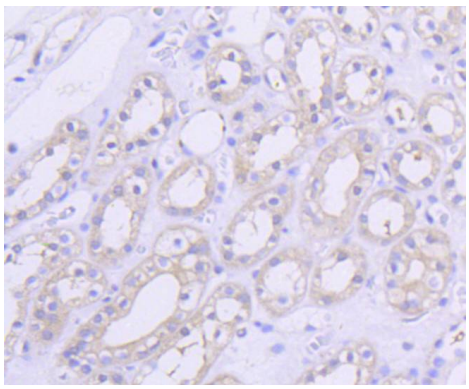
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

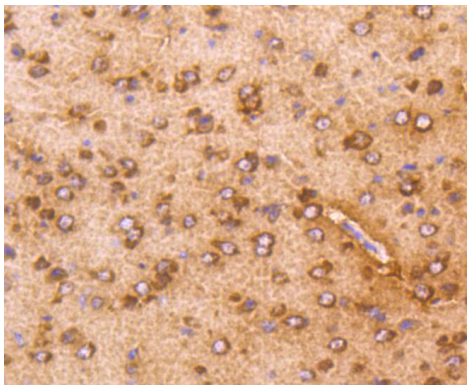
Images



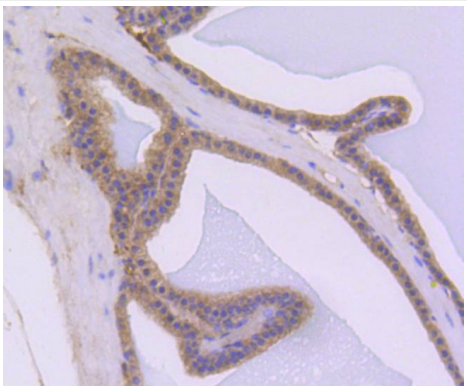
Western blot analysis of AKT1 on MCF-7 cell lysates using anti-AKT1 antibody at 1/1,000 dilution.



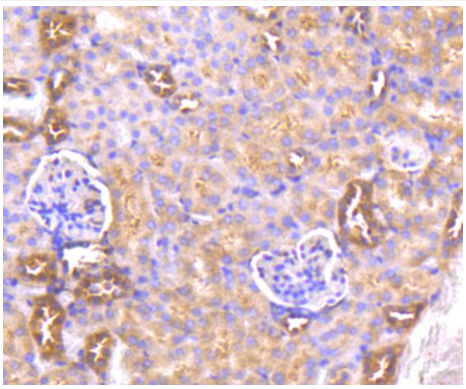
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-AKT1 antibody. Counter stained with hematoxylin.



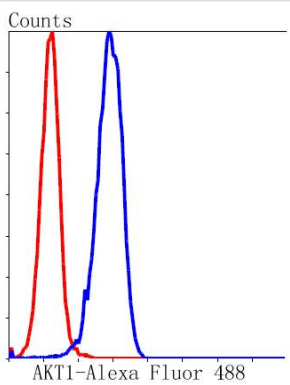
Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-AKT1 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse prostate tissue using anti-AKT1 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-AKT1 antibody. Counter stained with hematoxylin.



Flow cytometric analysis of Hela cells with AKT1 antibody at 1/50 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

The serine/threonine kinase Akt family contains several members, including Akt1 (also designated PKB or RacPK), Akt2 (also designated PKBβor RacPK-β) and Akt 3 (also designated PKB? or thyoma viral proto-oncogene 3), which exhibit sequence homology with the protein kinase A and C families and are encoded by the c-Akt proto-oncogene. All members of the Akt family have a pleckstrin homology domain. Akt1 and Akt2 are activated by PDGF stimulation. This activation is dependent on PDGFR-β tyrosine residues 740 and 751, which bind the subunit of the phosphatidylinositol 3-kinase (PI 3-kinase) complex. Activation of Akt1 by insulin or insulin-growth factor-1(IGF-1) results in phosphorylation of both Thr 308 and Ser 473. Phosphorylation of both residues is important to generate a high level of Akt1 activity, and the phosphorylation of Thr 308 is not dependent on phosphorylation of Ser 473 in vivo. Thus, Akt proteins become phosphorylated and activated in insulin/IGF-1-stimulated cells by an upstream kinase(s). The activation of Akt1 and Akt2 is inhibited by the PI kinase inhibitor wortmannin, suggesting that the protein signals downstream of the PI kinases.

References

1. Wang, H. et al. 2016. CSL regulates AKT to mediate androgen independence in prostate cancer progression. Prostate. 76: 140-50.
2. Wang, Z. et al. 2016. Protein 41N acts as a potential tumor suppressor linking PP1 to JNK-c-Jun pathway regulation in NSCLC. Oncotarget. 7: 509-23.

Published Papers

el at., CCDC65, a Gene Knockout that leads to Early Death of Mice, acts as a potentially Novel Tumor Suppressor in Lung Adenocarcinoma. In Int J Biol Sci

on 2022 Jun 27 by Ziyan Zhang, Ping Xu, et al..PMID:35844805, , (2022)

PMID:35844805

Note: This product is for in vitro research use only and is not intended for use in humans or animals.