Datasheet for ABIN6136733

anti-AKT1 antibody (C-Term)

6 Images | 3 Publications

Go to Product page

Overview

Quantity:	100 µL
Target:	AKT1
Binding Specificity:	C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This AKT1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

Product Details

Immunogen:	A synthetic peptide corresponding to a sequence within amino acids 400 to the C-terminus of human AKT1 (NP_005154.2).
Sequence:	KEIMQHRFFA GIVWQHVYEK KLSPPFKPQV TSETDTRYFD EEFTAQMITI TPPDQDDSME CVDSERRPHF PQFSYSASGT A
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Polyclonal Antibodies
Purification:	Affinity purification

Copyright antibodies-online. All rights reserved.

Target Details

Target:	AKT1
Alternative Name:	AKT1 (AKT1 Products)
Background:	The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery. Mutations in this gene have been associated with the Proteus syndrome. Multiple alternatively spliced transcript variants have been found for this gene.,AKT,CWS6,PKB,PKB-ALPHA,PRKBA,RAC,RAC-ALPHA,AKT1,Epigenetics & Nuclear Signaling,Translation Control,Regulation of eIF4 and p70 S6 Kinase,Cancer,Signal Transduction,G protein signaling,Kinase,Serine/threonine kinases,PI3K-Akt Signaling Pathway,mTOR Signaling Pathway,Protein Kinase C Signaling Pathway,ErbB-HER Signaling Pathway,Cell Biology & Developmental Biology,Apoptosis,Mitochondrial Control of Apoptosis,Inhibition of Apoptosis,Cell Cycle,G1/S Checkpoint,Cell Adhesion,Microtubules,TGF-b-Smad Signaling Pathway,ESC Pluripotency and Differentiation,Endocrine & Metabolism,AMPK Signaling Pathway,Insulin Receptor Signaling Pathway,Warburg Effect,Immunology & Inflammation,B Cell Receptor Signaling Pathway,T Cell Receptor Signaling Pathway,IL-6 Receptor Signaling Pathway,NF-kB Signaling Pathway,Neuroscience,Neurodegenerative Diseases,Amyloid Plaque and Neurofibrillary Tangle Formation in Alzheimer's Disease,Cardiovascular,Angiogenesis,AKT1
Molecular Weight:	48 kDa/55 kDa
Gene ID:	207
UniProt:	P31749
Pathways:	PI3K-Akt Signaling, RTK Signaling, TCR Signaling, AMPK Signaling, Interferon-gamma Pathway, TLR Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Response to Water Deprivation, Regulation of Actin Filament Polymerization , Carbohydrate Homeostasis, Glycosaminoglycan Metabolic Process, Cellular Glucan Metabolic Process, Regulation of Muscle Cell Differentiation, Cell-Cell Junction Organization, Regulation of Cell Size, Skeletal Muscle Fiber Development, Regulation of Carbohydrate Metabolic Process, Hepatitis C, Protein targeting to Nucleus, CXCR4-mediated Signaling Events, Signaling Events mediated by VEGFR1 and VEGFR2, Negative Regulation of intrinsic apoptotic Signaling,

Target Details

Thromboxane A2 Receptor Signaling, Signaling of Hepatocyte Growth Factor Receptor, Positive Regulation of fat Cell Differentiation, VEGFR1 Specific Signals, VEGF Signaling, Warburg Effect

Application Details

Application Notes:	WB,1:500 - 1:2000,IHC,1:50 - 1:100,IF,1:50 - 1:100,IP,1:50 - 1:200
Comment:	HIGH QUALITY
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

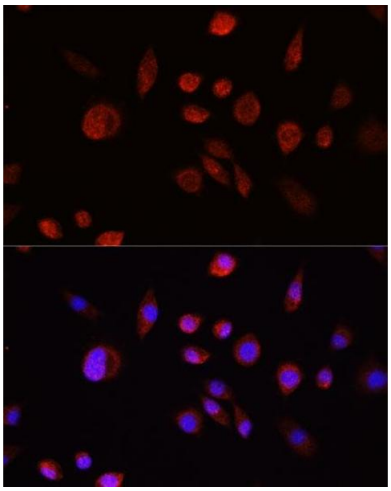
Publications

Product cited in:

Li, Yang, Zheng, Xing, Wu, Bian, Wu, Li, Li, Bai, Wu, Jia, Wang, Zhu, Jin: "TNF-α stimulates endothelial palmitic acid transcytosis and promotes insulin resistance." in: **Scientific reports**, Vol. 7, pp. 44659, (2018) (PubMed).

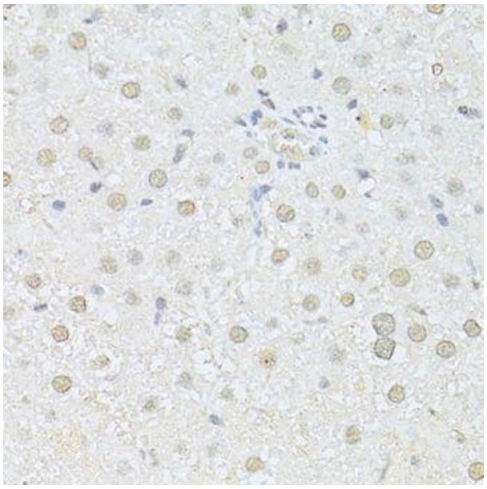
Oyagbemi, Omobowale, Asenuga, Ochigbo, Adejumobi, Adedapo, Yakubu: "Sodium arsenite-induced cardiovascular and renal dysfunction in rat via oxidative stress and protein kinase B (Akt/PKB) signaling pathway." in: **Redox report : communications in free radical research**, Vol. 22, Issue 6, pp. 467-477, (2018) (PubMed).

Xie, Liu, Chen, Xu, Zhan, Yang, Li, Zhou: "Umbilical cord-derived mesenchymal stem cells alleviated inflammation and inhibited apoptosis in interstitial cystitis via AKT/mTOR signaling pathway." in: **Biochemical and biophysical research communications**, Vol. 495, Issue 1, pp. 546-552, (2017) (PubMed).



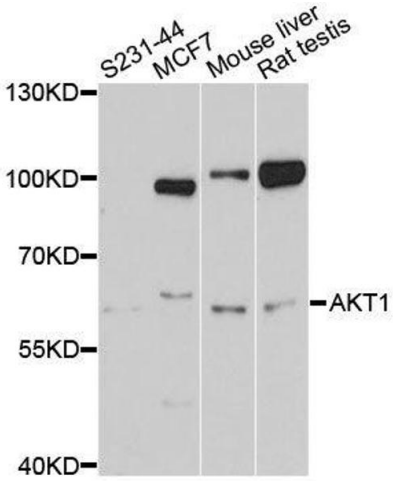
Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded rat lung using Rabbit pAb (ABIN6133551, ABIN6136733, ABIN6136738 and ABIN6215039) at dilution of 1:150 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Immunohistochemistry of paraffin-embedded rat liver using AKT1 antibody.



Western Blotting

Image 3. Western blot analysis of extracts of various cell lines, using AKT1 antibody.

Please check the product details page for more images. Overall 6 images are available for ABIN6136733.