



Datasheet for ABIN7271243  
**anti-AKT1 antibody**



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7 Images

Overview

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

Product Details

Purpose:	AKT1 Rabbit mAb
Immunogen:	A synthesized peptide derived from human AKT1
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Monoclonal Antibodies
Purification:	Affinity purification

Target Details

Target:	AKT1
Alternative Name:	AKT1 ( <a href="#">AKT1 Products</a> )

## Target Details

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**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. [provided by RefSeq, Jul 2011],AKT,CWS6,PKB,PKB-ALPHA,PRKBA,RAC,RAC-ALPHA,AKT1,AMPK Signaling Pathway,Angiogenesis,Apoptosis,Apoptosis\_Inhibition of Apoptosis,Apoptosis\_Mitochondrial Control of Apoptosis,B Cell Receptor Signaling Pathway,Cancer,Cardiovascular,Cell Adhesion,Cell Biology & Developmental Biology,Cell Cycle,Cytoskeleton\_Microtubules,Endocrine & Metabolism,Epigenetics & Nuclear Signaling,ErbB-HER Signaling Pathway,ESC Pluripotency and Differentiation,G protein signaling,G1/S Checkpoint,IL-6 Receptor Signaling Pathway,Immunology & Inflammation,Insulin Receptor Signaling Pathway,Kinase,Kinase\_Serine/threonine kinases,mTOR Signaling Pathway,Neurodegenerative Diseases,Neurodegenerative Diseases\_Amyloid Plaque and Neurofibrillary Tangle Formation in Alzheimers Disease,Neuroscience,NF-kB Signaling Pathway,PI3K-Akt Signaling Pathway,Protein Kinase C Signaling Pathway Pathway,Protein phosphorylation,Signal Transduction,T Cell Receptor Signaling Pathway,TGF-b-Smad Signaling Pathway,Translation Control,Translational Control\_Regulation of eIF4 and p70 S6 Kinase,Warburg Effect,AKT1

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Molecular Weight: 56kDa

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Gene ID: 207

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UniProt: [P31749](#)

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**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 - 1:200,IF,1:50 - 1:200,IP,1:50 - 1:200

Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: PBS with 0.02 % sodium azide,0.05 % BSA,50 % glycerol, pH 7.3.

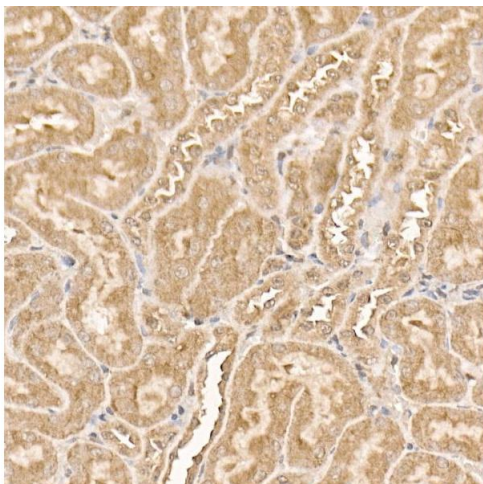
Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

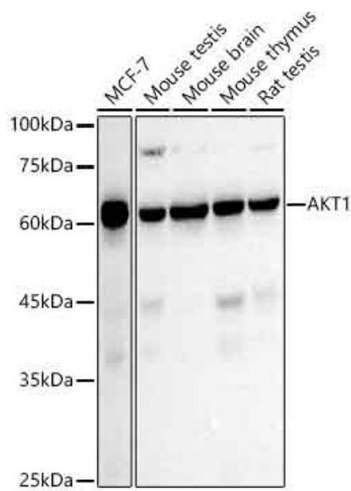
Storage Comment: Store at -20°C. Avoid freeze / thaw cycles.

## Images



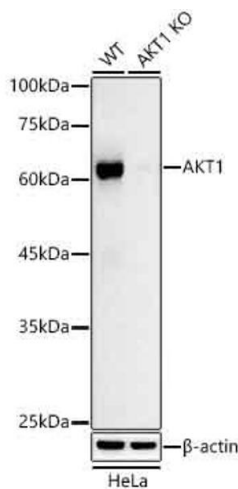
### Immunohistochemistry

**Image 1.** Immunohistochemistry of paraffin-embedded mouse kidney using [KO Validated] Rabbit mAb (ABIN7271243) 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.



### Western Blotting

**Image 2.** Western blot analysis of extracts of various cell lines, using antibody (ABIN7271243) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3 % nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.



### Western Blotting

**Image 3.** Western blot analysis of extracts from wild type (WT) and knockout (KO) HeLa cells, using antibody (ABIN7271243) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3 % nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.

Please check the [product details page](#) for more images. Overall 7 images are available for ABIN7271243.