Datasheet for ABIN6135970

anti-AKT1 antibody (pSer473)

7 Images

Go to Product page

Overview

Quantity:	100 µL
Target:	AKT1
Binding Specificity:	pSer473
Reactivity:	Human
Host:	Rabbit
Clonality:	Monoclonal
Conjugate:	This AKT1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	A phospho specific peptide corresponding to residues surrounding S473 of human AKT1
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Phosphorylated Antibodies
Purification:	Affinity purification

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,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
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, Thromboxane A2 Receptor Signaling, Signaling of Hepatocyte Growth Factor Receptor, Positive

Target Details

Regulation of fat Cell Differentiation, VEGFR1 Specific Signals, VEGF Signaling, Warburg Effect

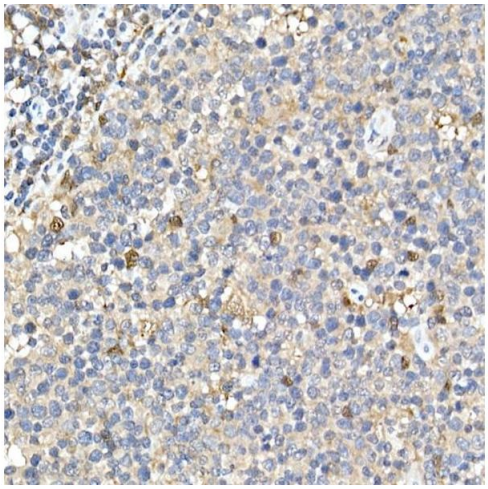
Application Details

Application Notes:	WB,1:500 - 1:2000
Restrictions:	For Research Use only

Handling

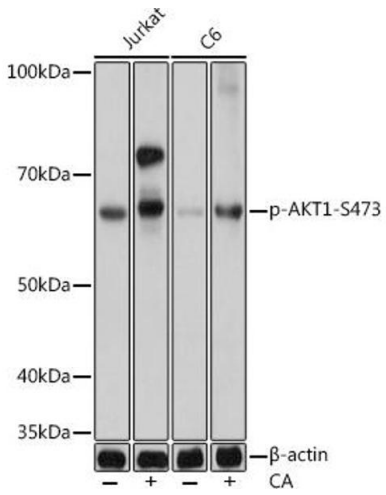
Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,0.05 % BSA,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

Images



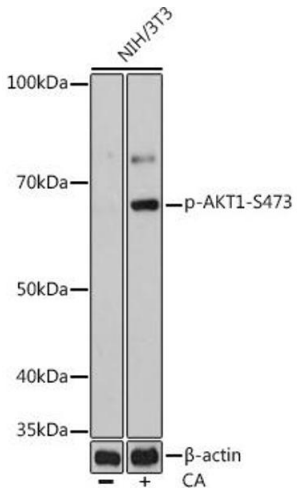
Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded rat stomach using Phospho--S473 Rabbit mAb (ABIN6135179, ABIN6135970, ABIN6135971 and ABIN7101880) 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 Phospho--S473 mAb (ABIN6135179, ABIN6135970, ABIN6135971 and ABIN7101880) at 1:1000 dilution.Both Jurkat cells and C6 cells were treated by Calyculin A (100 nM) at 37 °C for 30 minutes.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: 1s.



Western Blotting

Image 3. Western blot analysis of extracts of NIH/3T3 cells, using Phospho--S473 mAb (ABIN6135179, ABIN6135970, ABIN6135971 and ABIN7101880) at 1:1000 dilution.NIH/3T3 cells were treated by Calyculin A (100 nM) at 37 °C for 30 minutes.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: 10s.

Please check the product details page for more images. Overall 7 images are available for ABIN6135970.