Datasheet for ABIN5596674

anti-AKT2 antibody (Internal Region) (FITC)

4 Images

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Overview

Quantity:	50 µg
Target:	AKT2
Binding Specificity:	Internal Region
Reactivity:	Human
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This AKT2 antibody is conjugated to FITC
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Flow Cytometry (FACS), Fluorescence Microscopy (FM)

Product Details

Immunogen:	Immunogen: Anti-AKT2 Antibody was produced in rat by repeated immunizations with a synthetic peptide corresponding to internal residues of human AKT2 protein. Immunogen Type: Peptide
Clone:	16G11-E8
Isotype:	IgG2a
Cross-Reactivity (Details):	Cross reactivity with AKT2 from other species has not been determined, however, the sequence of the immunogen shows 88% identity to mouse and 90% identity with rat, therefore, cross reactivity is expected.
Purification:	Anti-AKT2 antibody is directed against human AKT2. The antibody detects both unphosphorylated and phosphorylated forms of the protein. Anti-AKT2 was purified from

Product Details

	concentrated tissue culture supernate by Protein G chromatography.
Labeling Ratio:	1-2

Target Details

Target:	AKT2
Alternative Name:	AKT2 (AKT2 Products)
Background:	Synonyms: AKT 2 antibody, AKT-2, PKB antibody, PKB beta antibody, PKBBETA antibody, PRKBB antibody, Protein kinase Akt 2 antibody, Protein kinase B beta antibody, RAC-beta serine/threonine-protein kinase, RAC-PK-beta Background: AKT is a component of the PI-3 kinase pathway and is activated by phosphorylation at Ser 473 and Thr 308. AKT is a cytoplasmic protein also known as AKT1, Protein Kinase B (PKB) and rac (related to A and C kinases). AKT is a key regulator of many signal transduction pathways. AKT Exhibits tight control over cell proliferation and cell viability. Overexpression or inappropriate activation of AKT is noted in many types of cancer. AKT mediates many of the downstream events of PI 3-kinase (a lipid kinase activated by growth factors, cytokines and insulin). PI 3-kinase recruits AKT to the membrane, where it is activated by PDK1 phosphorylation. Once phosphorylated, AKT dissociates from the membrane and phosphorylates targets in the cytoplasm and the cell nucleus. AKT has two main roles: (i) inhibition of apoptosis, (ii) promotion of proliferation. Anti-AKT2 (RAT) PE conjugated Monoclonal Antibody is ideal for investigators involved in Cell Signaling, Cancer, Neuroscience, Signal Transduction research. Gene Name: AKT2
Gene ID:	208
UniProt:	P31751
Pathways:	PI3K-Akt Signaling, RTK Signaling, AMPK Signaling, TLR Signaling, Cellular Glucan Metabolic Process, Regulation of Carbohydrate Metabolic Process, Hepatitis C, VEGF Signaling

Application Details

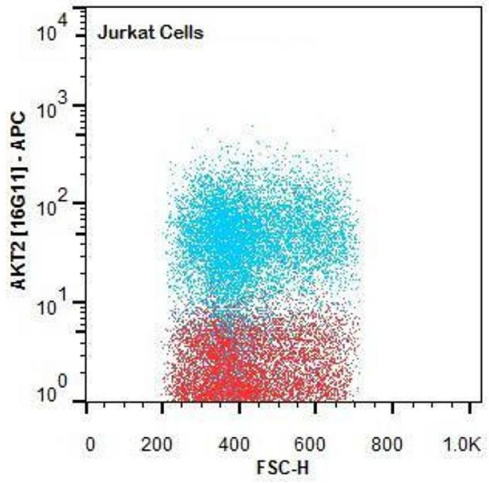
Application Notes:	Flow Cytometry Dilution: User Optimized Immunohistochemistry Dilution: User optimized Application Note: Anti-AKT2 FITC Antibody is suitable for Flow Cytometry, ELISA, immunohistochemistry, and western blotting. Expect a band approximately 56 kDa in size corresponding to AKT2 protein by western blotting in the appropriate cell lysate or extract. This

Application Details

	monoclonal antibody reacts with human AKT. Specific conditions for reactivity should be optimized by the end user. For immunohistochemistry we recommend the use of fresh frozen tissues. Attempts at staining paraffin-embedded formalin fixed tissues were negative. No pre-treatment of sample is required. Western Blot Dilution: User Optimized ELISA Dilution: User Optimized IF Microscopy Dilution: User optimized
Restrictions:	For Research Use only

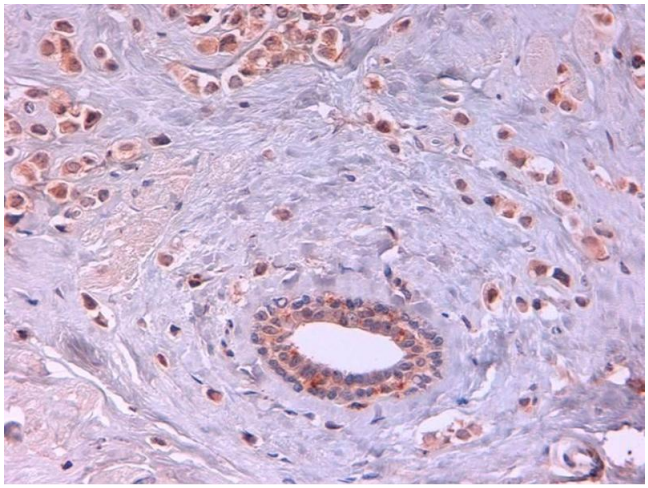
Handling

Format:	Lyophilized
Reconstitution:	Reconstitution Volume: 100 µL to 20 µL Reconstitution Buffer: Restore with deionized water (or equivalent)
Concentration:	1.0 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.5 M Sodium Chloride, pH 7.2 Stabilizer: 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
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:	4 °C,-20 °C
Storage Comment:	Store vial at 4° C prior to restoration. Restore with deionized water (or equivalent). For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of restoration.
Expiry Date:	12 months



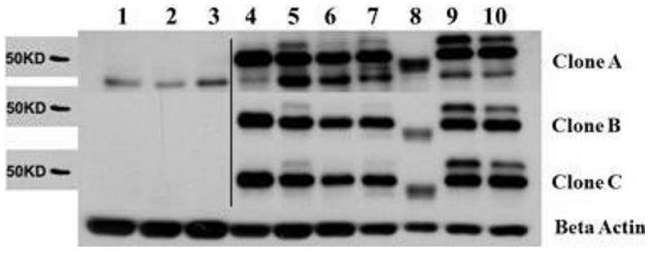
Flow Cytometry

Image 1. Flow Cytometry of Rat anti-AKT2 antibody. Cells: Jurkat Cells. Stimulation: none. Primary antibody: Allophycocyanin AKT2 antibody at 1.0 µg/mL for 20 min at 4°C.



Immunohistochemistry

Image 2. Immunohistochemistry of Rat monoclonal anti AKT2 unconjugated Antibody in human breast carcinoma. Tissue: Human Breast Cancer. Fixation: FFPE buffered formalin 10% conc. Ag Retrieval: Heat, Citrate pH 6.2. Pressure Cooker. antibody: 2ug/ml 1.5 hour @ room T. Secondary Ab: mouse anti rat 1:50 45" RT.



Western Blotting

Image 3. Western Blot of Rat Anti-AKT2 antibody. Lane 1: C2C12. Lane 2: MEF#1. Lane 3: MEF#2. Lane 4: A549. Lane 5: Calu-1. Lane 6: PC3. Lane 7: HepG2. Lane 8: Jurkat. Lane 9: SKOV3. Lane 10: 293T. Load: 35 µg per lane. Primary antibody: AKT2 unconjugated antibody at 1:1000 for overnight at 4°C. Secondary antibody: Rat secondary antibody at 1:20,000 for 1 h at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 56 kDa for AKT 2.

Please check the product details page for more images. Overall 4 images are available for ABIN5596674.