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anti-AKT2 antibody (Internal Region) (PE)





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Quantity:	50 μg
Target:	AKT2
Binding Specificity:	Internal Region
Reactivity:	Human
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This AKT2 antibody is conjugated to PE
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:	lgG2a
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 PE 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. Thi

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 pretreatment of sample is required.

Western Blot Dilution: User Optimized

ELISA Dilution: User Optimized

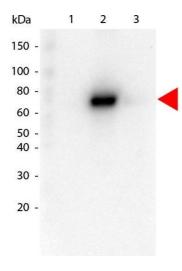
IF Microscopy Dilution: User optimized

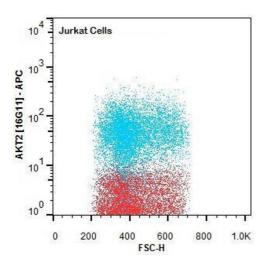
Restrictions:

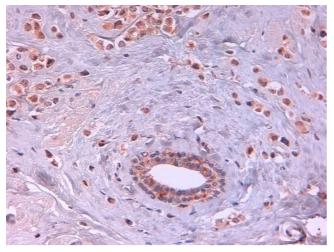
For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitution Volume: 100 μ L to 20 μ L 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:	Without preservative
Storage:	4 °C
Storage Comment:	Store vial at 4° C prior to opening. Dilute only prior to immediate use. Do not freeze after reconstitution. Store reagent in the dark. This product is stable at 4° C as an undiluted liquid. Use subdued lighting during handling and incubation of cells prior to analysis.
Expiry Date:	12 months







Western Blotting

Image 1. Western Blot of Rat anti-AKT2 antibody. Lane 1: GST Tagged recombinant AKT1. Lane 2: GST Tagged recombinant AKT2. Lane 3: GST Tagged recombinant AKT3. Load: 25 ng per lane. Primary antibody: AKT2 unconjugated antibody at 1:1,000 for overnight at 4°C. Secondary antibody: Peroxidase rat secondary antibody at 1:40,000 for 30 min at RT. Block: ABIN925618 for 30 min at RT. Predicted/Observed size: 78 kDa for AKT2. Other band(s): none.

Flow Cytometry

Image 2. Flow Cytometry of Rat anti-AKT2 antibody. Cells: Jurkat Cells. Stimulation: none. Primary antibody: Allophycocyanin AKT2 antibody at 1.0 μ g/mL for 20 min at 4°C.

Immunohistochemistry

Image 3. 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.

Please check the product details page for more images. Overall 4 images are available for ABIN5596676.