

Datasheet for ABIN1607691

anti-AKT3 antibody (Internal Region)



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3 Images

Overview

Quantity:	1 mg
Target:	AKT3
Binding Specificity:	Internal Region
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Flow Cytometry (FACS), Immunofluorescence (IF), Fluorescence Microscopy (FM)

Product Details

Purpose:	AKT3 Antibody
Immunogen:	Immunogen: Anti-AKT3 Antibody was produced in mice by repeated immunizations with a synthetic peptide corresponding to internal residues of human AKT3 protein. Immunogen Type: Conjugated Peptide
Clone:	9A5-H9-G7
Isotype:	IgG1 kappa
Cross-Reactivity (Details):	Anti-AKT3 antibody is directed against human AKT3. The antibody detects both unphosphorylated and phosphorylated forms of the protein.
Characteristics:	Synonyms: Mouse anti-AKT3 antibody, AKT-3, PKB antibody, PKB gamma antibody, PKBGAMMA antibody, PRKBG antibody, Protein kinase Akt 3 antibody, Protein kinase B gamma antibody, RAC-gamma serine/threonine-protein kinase, RAC-PK-gamma

Product Details

Sterility: Sterile filtered

Target Details

Target: AKT3

Alternative Name: AKT3 ([AKT3 Products](#))

Background: Background: AKT3 Antibody detects AKT3 which 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 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-AKT3 Antibody is ideal for investigators involved in Cell Signaling, Neuroscience and Signal Transduction research.

Gene ID: 10000

NCBI Accession: [NP_001193658](#)

UniProt: [Q9Y243](#)

Pathways: [PI3K-Akt Signaling](#), [RTK Signaling](#), [TLR Signaling](#), [Hepatitis C](#), [VEGF Signaling](#)

Application Details

Application Notes: Flow Cytometry Dilution: User Optimized
Immunohistochemistry Dilution: 20 µg/mL
Application Note: Anti-AKT3 Antibody is tested in ELISA, IF, and western blotting. This antibody is suitable in immunohistochemistry and flow cytometry. Expect a band approximately 56 kDa in size corresponding to AKT3 protein by western blotting in the appropriate cell lysate or extract. This 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: 1:500-1:2000
ELISA Dilution: 1:2,000 - 1:10,000

Application Details

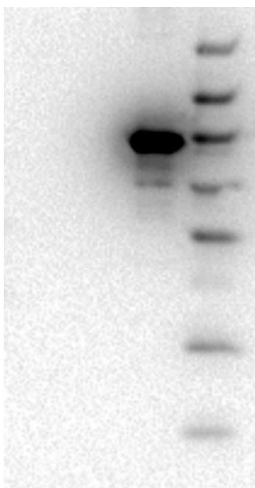
	IF Microscopy Dilution: User Optimized
	Other: User Optimized

Restrictions: For Research Use only

Handling

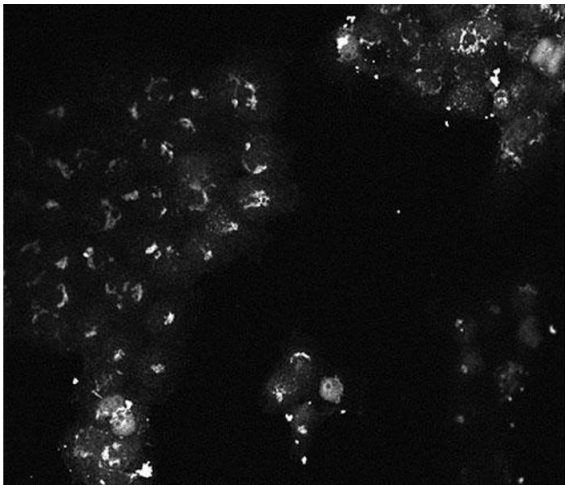
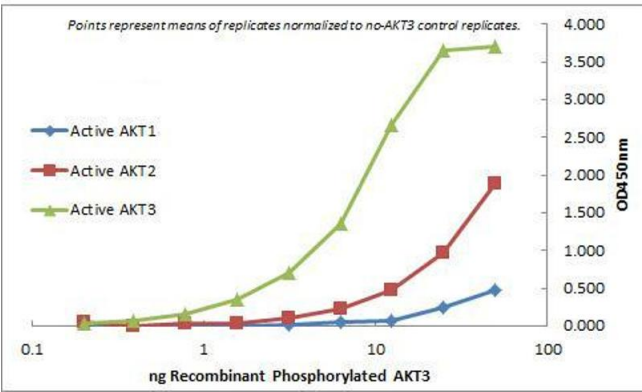
Format:	Liquid
Concentration:	0.7 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: None
Preservative:	Without preservative
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Western Blot of Mouse monoclonal anti-AKT3 antibody. Lane 1: GST-AKT1. Lane 2: GST-AKT2. Lane 3: GST-AKT3. Load: 50 ng per lane. Primary antibody: anti-AKT3 antibody at 1:1000 for overnight at 4°C. Secondary antibody: Rabbit secondary antibody anti mouse at 1:40,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 85 kDa for GST-AKT3.



ELISA

Image 2. ELISA of Mouse Monoclonal anti-AKT3 antibody. Antigen: GST AKT1, GST AKT2, GST AKT3. Coating amount: starting from 50 ng/well. Primary antibody: Mouse monoclonal anti-AKT3 antibody at 100ng/well. Dilution series: 2-fold. Mid-point concentration: 3 ng/mL Mouse monoclonal anti-AKT3 antibody. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000. Substrate: TMB .

Immunofluorescence

Image 3. Immunofluorescence of Mouse monoclonal anti-AKT3 antibody Cell Type: A431 cells Fixation: 4% paraformaldehyde 10 min Permeablization: 0.5% Triton X 30 min Primary Ab: 200-301-J36 1:250 72 hours 4°C Secondary Ab: 610-142-121 1:1000 Overnight 4°C