

# Datasheet for ABIN1607690

# anti-AKT3 antibody (Internal Region)





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### Overview

Quantity:	100 μg
Target:	AKT3
Binding Specificity:	Internal Region
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This AKT3 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Flow Cytometry (FACS), Immunofluorescence (IF), Fluorescence Microscopy (FM)

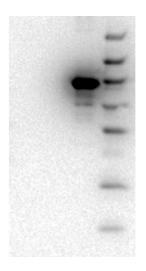
# **Product Details**

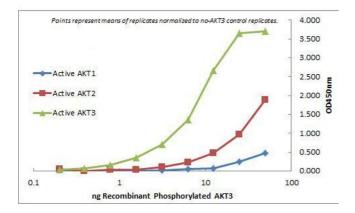
Purpose:	AKT3 Antibody
Immunogen:	Immunogen: Anti-AKT3 Antibody was produced in mice by repeated immunizations with a synthetic peptide corresponding to internal residues of human AKT3 protein.  Immunogen Type: Conjugated Peptide
Clone:	9A5-H9-G7
Isotype:	IgG1 kappa
Cross-Reactivity (Details):	Anti-AKT3 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

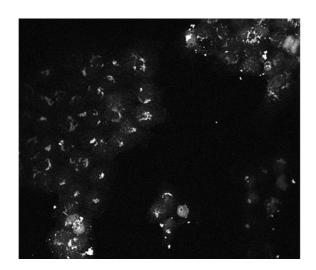
	antibody, RAC-gamma serine/threonine-protein kinase, RAC-PK-gamma
Sterility:	Sterile filtered
Target Details	
Target:	AKT3
Alternative Name:	AKT3 (AKT3 Products)
Background:	Background: AKT3 Antibody detects AKT3 which is a component of the PI-3 kinase pathway and is activated by phosphorylation at Ser 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 membran 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.

# **Application Details**

	Western Blot Dilution: 1:500-1:2000
	ELISA Dilution: 1:2,000 - 1:10,000
	IF Microscopy Dilution: User Optimized
	Other: User Optimized
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Concentration:	1mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
	Stabilizer: None
	Preservative: 0.01 % (w/v) Sodium Azide
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 -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







### **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