

Datasheet for ABIN5596896

**anti-AKT3 antibody (Internal Region) (Biotin)****5** Images[Go to Product page](#)

## Overview

Quantity:	50 µg
Target:	AKT3
Binding Specificity:	Internal Region
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This AKT3 antibody is conjugated to Biotin
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Flow Cytometry (FACS), Fluorescence Microscopy (FM)

## Product Details

Immunogen:	Immunogen: Anti-AKT3 Antibody was prepared from tissue culture supernatant by Protein A affinity chromatography using a synthetic peptide corresponding to internal residues of human AKT3 protein. Immunogen Type: Peptide
Clone:	25F6-F6-D8
Isotype:	IgG1
Cross-Reactivity (Details):	Cross reactivity with AKT3 from other species has not been determined, however, the sequence of the immunogen shows 100% identity to human, mouse, and rat, therefore, cross reactivity is expected. Cross-reactivity with AKT2 and AKT has not been determined.
Purification:	Anti-AKT3 antibody is directed against human AKT3. The antibody detects both

## Product Details

unphosphorylated and phosphorylated forms of the protein. Anti-AKT3 antibody was purified from tissue culture by Protein A chromatography.

## Target Details

Target:	AKT3
Alternative Name:	AKT3 ( <a href="#">AKT3 Products</a> )
Background:	<p>Synonyms: AKT 3 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</p> <p>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-AKT3 (MOUSE) PE conjugated Monoclonal Antibody is ideal for investigators involved in Cell Signaling, Cancer, Neuroscience, Signal Transduction research.</p> <p>Gene Name: AKT3</p>
Gene ID:	10000
UniProt:	<a href="#">Q9Y243</a>
Pathways:	<a href="#">PI3K-Akt Signaling</a> , <a href="#">RTK Signaling</a> , <a href="#">TLR Signaling</a> , <a href="#">Hepatitis C</a> , <a href="#">VEGF Signaling</a>

## Application Details

Application Notes:	<p>Flow Cytometry Dilution: User Optimized</p> <p>Immunohistochemistry Dilution: User optimized</p> <p>Application Note: Anti-AKT3 BIOTIN Antibody is suitable for Flow Cytometry, ELISA, immunohistochemistry, and western blotting. 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</p>
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## Application Details

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  $\mu$ L to 20  $\mu$ 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

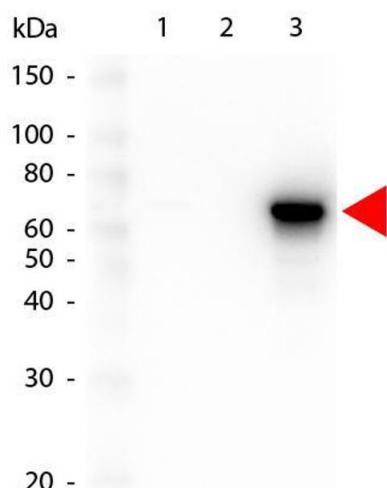
Preservative: Sodium azide

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

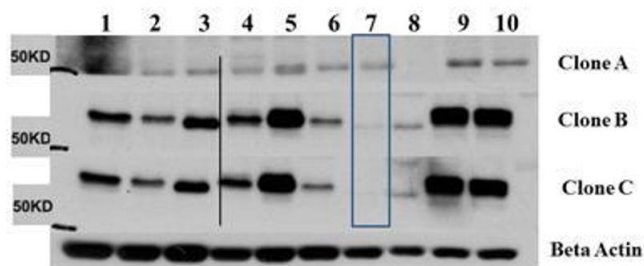
Storage Comment: Store vial at 4° C prior to restoration. Restore with deionized water (or equivalent). For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product 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



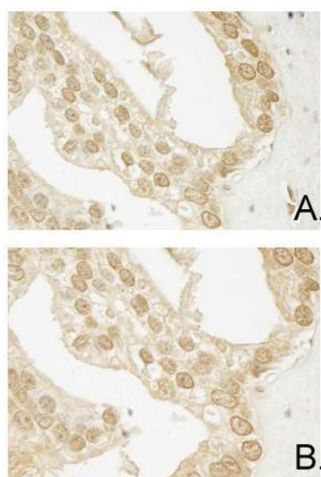
#### Western Blotting

**Image 1.** Western Blot of Mouse anti-AKT3 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: AKT3 unconjugated antibody at 1:1,000 for overnight at 4°C. Secondary antibody: Peroxidase mouse secondary antibody at 1:40,000 for 30 min at RT. Block: ABIN925618 for 30 min at RT. Predicted/Observed size: 78 kDa for AKT3. Other band(s): none.



#### Western Blotting

**Image 2.** Western Blot of Mouse Anti-AKT3 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: AKT-3 unconjugated antibody at 1:1000 for overnight at 4°C. Secondary antibody: Anti mouse secondary antibody at 1:20,000 for 1 h at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 56 kDa for AKT3.



#### Immunohistochemistry

**Image 3.** Immunohistochemistry of Mouse Anti-AKT3 antibody. Tissue: human prostate carcinoma. A) AKT-3 antibody produced using CELLLine, B) AKT-3 antibody produced using roller bottle. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: AKT-3 unconjugated antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000 for 1 h at RT. Localization: AKT3 is nuclear and occasionally cytoplasmic. Staining: AKT3 as precipitated brown signal with hematoxylin purple nuclear counterstain.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN5596896.