

Datasheet for ABIN1043749

anti-AKT3 antibody (Internal Region)

5 Images

1 Publication

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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)

Product Details

Immunogen:	Anti-AKT3 Antibody was produced by repeated immunizations with a synthetic peptide corresponding to internal residues of human AKT3 protein. Immunogen Type: Peptide
Clone:	25F6-F6-D8
Isotype:	IgG1 kappa
Specificity:	Anti-AKT3 antibody is directed against human AKT3. The antibody detects both unphosphorylated and phosphorylated forms of the protein. Anti-AKT3 antibody was purified from ascites by Protein A chromatography. Cross reactivity with AKT3 from other species has not been determined, however, the sequence of the immunogen shows 85% identity to mouse and 92% identity with rat, therefore, cross reactivity is expected.
Characteristics:	AKT3 Antibody detects AKT3 which is a component of the PI-3 kinase pathway and is activated

Product Details

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.

Sterility: Sterile filtered

Target Details

Target: AKT3

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

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.

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

Gene ID: 10000

UniProt: [Q9Y243](#)

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

Application Details

Application Notes: Anti-AKT3 Antibody is suitable for 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 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.

Comment: Gene Name: AKT3

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: Sodium azide

Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

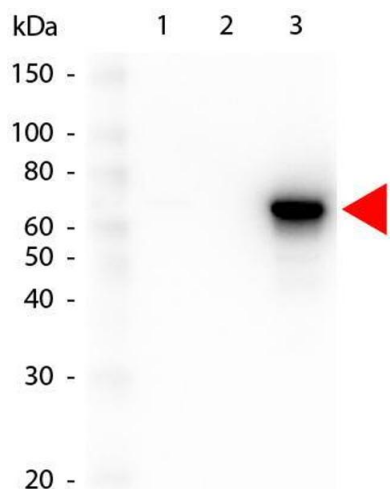
Storage: 4 °C/-20 °C

Storage Comment: Store vial at 4 °C prior to restoration. 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 opening.

Expiry Date: 12 months

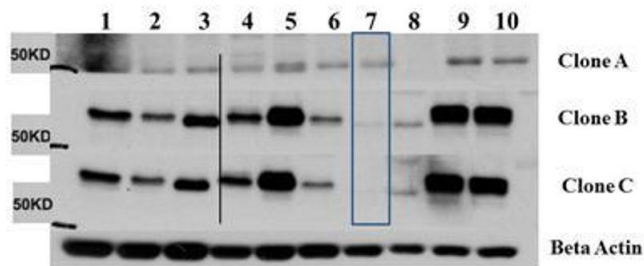
Publications

Product cited in: Baek, Eling: "Changes in gene expression contribute to cancer prevention by COX inhibitors." in: **Progress in lipid research**, Vol. 45, Issue 1, pp. 1-16, (2006) ([PubMed](#)).



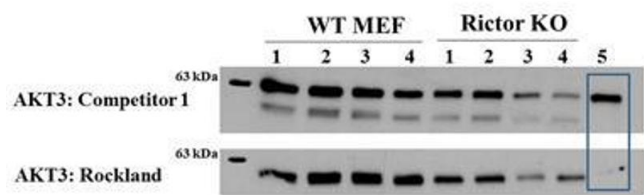
Western Blotting

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 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 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.



Western Blotting

Image 3. Western Blot of Mouse anti-AKT3 antibody. Lane 1: Control. Lane 2: Rapa. Lane 3: T50. Lane 4: T250. Lane 5: Control. Lane 6: Rapa. Lane 7: T50. Lane 8: T250. Lane 9: AKT3 null. Load: 35 µg per lane. Primary antibody: AKT-3 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.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN1043749.