

Datasheet for ABIN349616
anti-AKT 1/2/3 antibody



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4 Images

1 Publication

Overview

Quantity:	100 µg
Target:	AKT 1/2/3
Reactivity:	Human, Mouse, Rat, Chimpanzee
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Flow Cytometry (FACS), ELISA

Product Details

Purpose:	AKT Antibody
Immunogen:	<p>Immunogen: Anti-AKT Antibody was produced by repeated immunizations in mice with a synthetic peptides corresponding to residues internal to the human AKT1, AKT2, and AKT3 proteins.</p> <p>Immunogen Type: Conjugated Peptide</p>
Clone:	14E5-16C8-25F6
Isotype:	IgG
Cross-Reactivity (Details):	This antibody is specific for human and mouse AKT protein.
Characteristics:	Synonyms: mouse anti-AKT Antibody, RAC-PK-alpha, Protein kinase B, PKB, C-AKT, RAC-alpha serine/threonine-protein kinase, Proto-oncogene c-Akt, AKT1, AKT2, AKT3
Purification:	Anti-AKT Antibody was purified by Protein A chromatography.
Sterility:	Sterile filtered

Target Details

Target:	AKT 1/2/3
Alternative Name:	AKT1, AKT2, AKT3 (AKT 1/2/3 Products)
Background:	<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-AKT Antibody is ideal for investigators involved in Cell Signaling, Neuroscience, Signal Transduction research.</p>
Gene ID:	207, 62241011
UniProt:	P31749

Application Details

Application Notes:	<p>Flow Cytometry Dilution: User Optimized</p> <p>Immunohistochemistry Dilution: 20 µg/mL</p> <p>Application Note: Mouse Anti-AKT Antibody is tested for ELISA and western blotting. This antibody is suitable for immunohistochemistry and immunoprecipitation. Expect a band approximately 54 - 56 kDa in size corresponding to AKT protein by western blotting in the appropriate cell lysate or extract. 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.</p> <p>Western Blot Dilution: 1:500 - 1:3,000</p> <p>ELISA Dilution: 1:20,000</p> <p>Other: User Optimized</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
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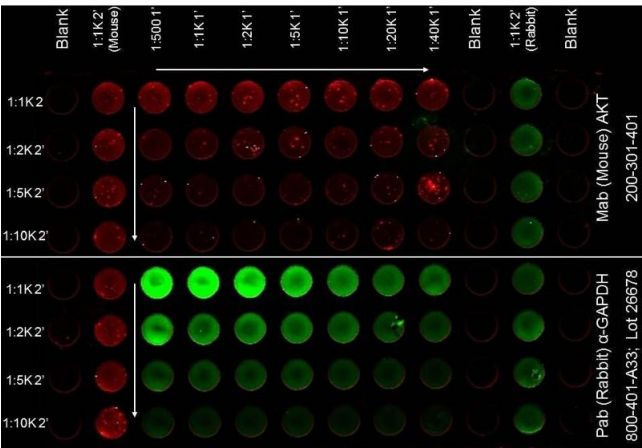
Handling

Concentration:	1.0 mg/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

Publications

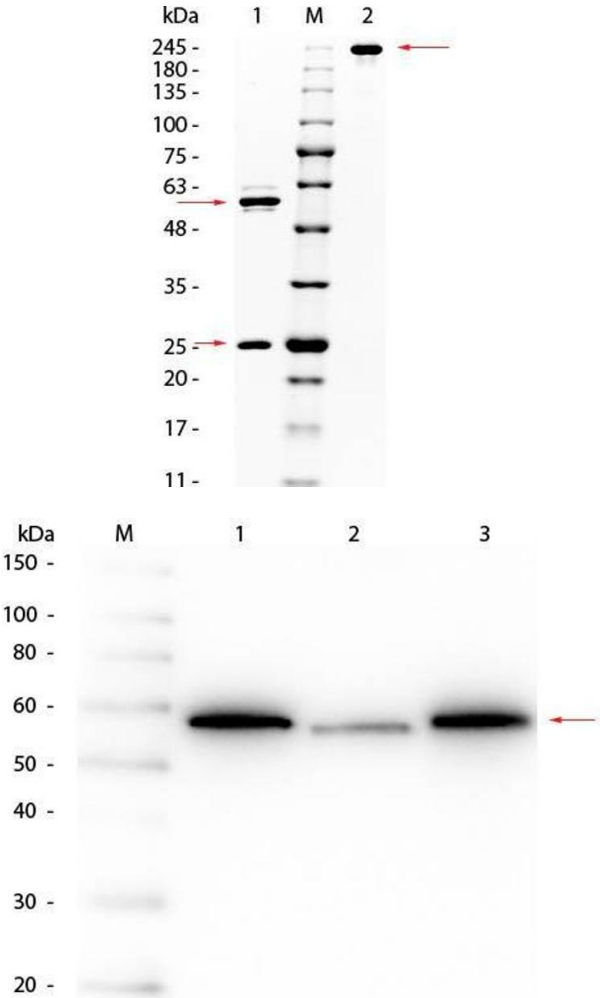
Product cited in:	Figliozi, Chen, Hsia: "New insights on thyroid hormone mediated regulation of herpesvirus infections." in: Cell & bioscience , Vol. 7, pp. 13, (2017) (PubMed).
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Images



ELISA

Image 1. ELISA of Mouse Anti-AKT Antibody. Antigen: HCT-116 cell line. Coating amount: Confluent in the 96 well plate. Primary antibody: AKT or GAPDH antibody at 2 µg/mL. Dilution series: Primary and Secondary Antibodies 2-fold. Mid-point concentration: N/A. Secondary antibody: 680 donkey secondary antibody and 800 goat secondary antibody starting at 1:1,000. Substrate: None.



SDS-PAGE

Image 2. SDS PAGE of Mouse anti-AKT Monoclonal Antibody. Lane 1: Reduced Mouse anti-AKT Monoclonal Antibody. Lane 2: 3 μ L Opal Prestained Marker . Lane 3: Non-Reduced Mouse anti-AKT Monoclonal Antibody. Load: 1 μ g per lane. Predicted/Observed size: Non-Reduced at 160kDa/Observed at 245 kDa; Reduced at 55, 25 kDa. Non-reduced migrates slightly higher.

Western Blotting

Image 3. Western Blot of Mouse anti-AKT Monoclonal Antibody. Lane 1: His-AKT1 Recombinant Protein. Lane 2: His-AKT2 Recombinant Protein. Lane 3: His-AKT3 Recombinant Protein. Load: 50 ng per lane. Primary antibody: Mouse anti-AKT Monoclonal Antibody at 1:1,000 overnight at 4°C. Secondary antibody: HRP mouse secondary antibody at 1:40,000 for 30 min at RT. Block: ABIN925618 for 30 min at RT. Predicted/Observed size: 54-56 kDa, 54-56 kDa for AKT1, AKT2, AKT3.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN349616.