

Datasheet for 600-601-401**AKT Antibody****Overview**

Description:	Anti-AKT (SHEEP) Antibody - 600-601-401
Item No.:	600-601-401
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Sheep

Product Details

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 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.
Synonyms:	sheep anti-AKT Antibody, RAC-PK-alpha, Protein kinase B, PKB, C-AKT, RAC-alpha serine/threonine-protein kinase, Proto-oncogene c-Akt, AKT1, AKT 1, AKT-1
Host Species:	Sheep
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	AKT1
Reactivity:	Human

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-AKT antibody was affinity purified antibody was prepared by repeated immunizations with a synthetic peptide corresponding to an internal region of human AKT1 protein. A residue of cysteine was added to facilitate coupling.
Purity/Specificity:	This antibody is directed against AKT and reacts with the AKT from human tissues. Based on sequence we expect this antibody to react as well with rat, mouse and chicken AKT.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - P31749• NCBI - 62241011• GenelD - 207

Application Details

Tested Applications:	ELISA, WB
Application Note:	This Anti-AKT affinity purified antibody is tested for ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user for IF and IHC. Expect a band approximately 55-60 kDa in size corresponding to AKT1 by western blotting in the appropriate cell lysate or extract. Cell Signaling, Neuroscience, Signal Transduction research.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:20,000
FC:	User Optimized
IF:	User Optimized
IHC:	User Optimized
WB:	1:500 - 1:2,000

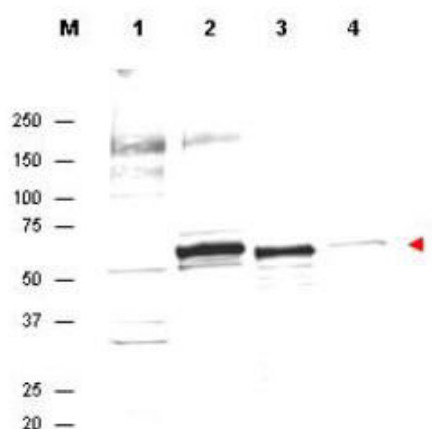
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.9 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.1% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

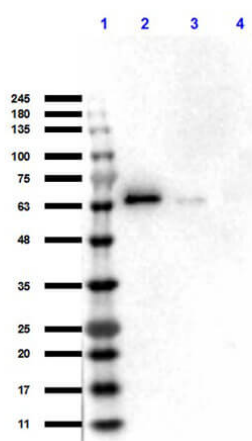
Shipping Condition:	Dry Ice
Storage Condition:	Store Anti-AKT at -20° C prior to opening. Aliquot antibody and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Anti-AKT Antibody. Lane 1: HeLa cells (p/n W09-000-364). Lane 2: H2O2 treated MCF7 cells (p/n W09-000-366). Lane 3: Recombinant AKT. Lane 4: A431 cells (p/n W09-000-372). Load: 35 µg per lane. Primary antibody: AKT antibody at 1:300 for overnight at 4°C. Secondary antibody: IRDYE800™ conjugated Dnky-a-Sheep IgG was used at a 1:10,000 dilution for 45 min at room temperature. Block: 1% BLOTTO (B501) overnight at 4°C. Predicted/Observed size: ~55-60 kDa for AKT. Other band (s): unspecific.



Western Blot

Western Blot of Sheep Anti-AKT Antibody. Lane 1: Opal prestained Molecular weight markers (p/n MB-210-0500). Lane 2: rec. AKT1 (p/n 009-001-P21). Lane 3: rec. AKT2 (p/n 009-001-P22). Lane 4: rec. AKT3 (p/n 009-001-P23). Load: 50ng. Primary antibody: AKT1 antibody at 1:1000 for overnight at 4°C. Secondary antibody: Donkey anti-Sheep IgG HRP (613-7302) at 1:70,000 for 30min at room temperature. Block: (p/n MB-073) BlockOut Buffer overnight at 4°C. Predicted/Observed size: ~60 kDa for AKT.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.