

Datasheet for 200-406-N98**AKT Antibody Biotin Conjugated****Overview**

Description:	Anti-AKT (RABBIT) Antibody Biotin Conjugated - 200-406-N98
Item No.:	200-406-N98
Size:	100 µg
Applications:	WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

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 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, Cancer, Neuroscience, Signal Transduction research.
Synonyms:	rabbit anti-AKT Antibody Biotin Conjugated, Biotin conjugated rabbit anti-AKT antibody, RAC-PK-alpha, Protein kinase B, PKB, C-AKT, RAC-alpha serine/threonine-protein kinase, Proto-oncogene c-Akt, AKT1 Antibody, AKT2 Antibody, AKT3 Antibody, Biotin, BAC
Host Species:	Rabbit
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	AKT1, AKT2, AKT3
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Reactivity:	Human, Mouse, Rat
Immunogen Type:	Native Protein
Immunogen:	Anti-AKT Pan Reactive Antibody was produced in rabbits by repeated immunizations with a cocktail containing recombinant human AKT1, AKT2, and AKT3 protein isoforms.
Purity/Specificity:	AKT Antibody reacts with the AKT from human tissues. Anti-AKT antibody was purified from monospecific antiserum by Protein A chromatography. Based on sequence we expect this antibody to react as well with rat, mouse, and chicken AKT.
Relevant Links:	• UniProtKB - P31749 • NCBI - NP_001014431.1 • GeneID - 207 • UniProtKB - Q9Y243 • NCBI - NP_001193658.1 • GeneID - 10000 • UniProtKB - P31751 • NCBI - NP_001617.1 • GeneID - 208

Application Details

Tested Applications:	WB
Application Note:	Biotin Conjugated AKT Antibody is tested for western blotting to detect a single band of the expected apparent molecular weight. This antibody is suitable for immunohistochemistry (Formalin-fixed paraffin-embedded sections), immunofluorescence microscopy using paraformaldehyde-fixed primary cardiomyocyte cultures, immunoprecipitation, transfected cell culture, primary cell culture and ELISA. Researchers should determine optimal titers for applications that are not stated below.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
FC:	User Optimized
IF:	User Optimized
IHC:	1:500 - 1:2,000
IP:	1:500 - 1:2,000
WB:	1:500 - 1:2,000

Formulation

Physical State:	Lyophilized
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.5 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	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:	Expiration date is one (1) year from date of receipt.

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.

