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Datasheet for 600-401-DU4

PTEN Antibody

Overview

Description:	Anti-PTEN (RABBIT) Antibody - 600-401-DU4
Item No.:	600-401-DU4
Size:	100 µg
Applications:	ELISA, IP, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	PTEN (phosphatase and tensin homologue deleted on chromosome ten) is a dual-specificity phosphatase (with both protein and lipid phosphatase activity) first identified as a tumor suppressor gene. PTEN indirectly activates the AKT/PI3K pathway, an important signaling pathway for cell growth and proliferation by keeping levels of the second messenger PIP3 low, thereby preventing phosphoinositide-dependent kinase-1 (PDK-1) from phosphorylating and activating AKT. Expression of wild-type PTEN causes growth arrest in many cancer cell lines, but expression of a PTEN protein containing a mutation that blocks its lipid phosphatase activity failed to suppress growth of glioma cell lines suggesting that the tumor suppressive effect of PTEN is mediated solely by its lipid phosphatase activity. Other activities include the inhibition of insulin stimulated MAPK activation by blocking the insulin-receptor substrate (IRS)-1 phosphorylation and assembly of the IRS-1/Grb2/Sos complex.
Synonyms:	PTEN Antibody, BZS, DEC, CWS1, GLM2, MHAM, TEP1, MMAC1, PTEN1, 10q23del, Phosphatidylinositol 3, 4, 5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN, Mutated in multiple advanced cancers 1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PTEN
Reactivity:	Human, Mouse

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-PTEN antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the C-terminus of human PTEN.
Purity/Specificity:	Anti-PTEN Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with PTEN from other sources has not been determined.
Relevant Links:	• UniProtKB - P60484 • GeneID - 5728 • NCBI - P60484

Application Details

Tested Applications:	ELISA, IP, WB
Application Note:	Anti-PTEN Antibody has been tested for use in ELISA, Western Blotting and Immunoprecipitation. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 47 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IP:	User Optimized
WB:	1 µg/mL

Formulation

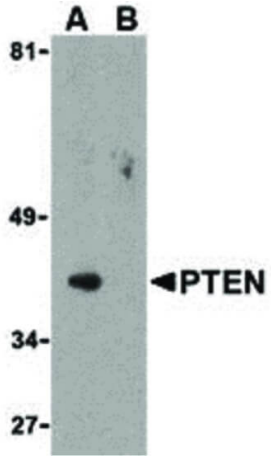
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice

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

Images



Western Blot
Western Blot of PTEN antibody in PC-3 cell lysate. Lane A: PTEN antibody in the absence of blocking peptide. Lane B: PTEN antibody in the presence of blocking peptide. Load: 35 µg per lane. Primary antibody: PTEN antibody at 1 µg/mL for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 47 kDa, 42 kDa for PTEN. Other band(s): PTEN splice variants and isoforms.

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.