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Datasheet for 600-401-A90

PTEN-P1 Antibody

Overview

Description:	Anti-PTEN-P1 (RABBIT) Antibody - 600-401-A90
Item No.:	600-401-A90
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	This gene (PTENP1) is a highly homologous pseudogene of PTEN. PTEN was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. PTEN is a phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase. It contains a tension like domain as well as a catalytic domain similar to that of the dual specificity protein tyrosine phosphatases. Unlike most of the protein tyrosine phosphatases, this protein preferentially dephosphorylates phosphoinositide substrates. It negatively regulates intracellular levels of phosphatidylinositol-3,4,5-trisphosphate in cells and functions as a tumor suppressor by negatively regulating AKT/PKB signaling pathway.
Synonyms:	rabbit anti-PTEN-P1 antibody, Phosphatase and tensin homolog 2, Phosphatidylinositol 3,4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN, Mutated in multiple advanced cancers 1, Phosphatase and tensin homolog, PTEN, MMAC1, TEP1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PTEN
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to amino acids near the N-terminal end of human PTEN-P1 protein.
Purity/Specificity:	This affinity-purified antibody is directed against human PTEN protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. Reactivity occurs against human PTEN protein. A BLAST analysis was used to suggest cross reactivity with PTEN proteins from mouse, dog sources based on 82% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.
Relevant Links:	• UniProtKB - O43460 • NCBI - 73765544 • GeneID - 5728

Application Details

Tested Applications:	ELISA, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 55 kDa in size corresponding to PTEN-P1 protein by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:160,000
WB:	1:500 to 1:2,000

Formulation

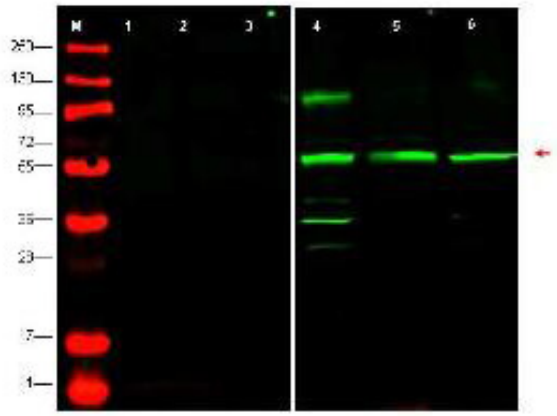
Physical State:	Liquid (sterile filtered)
Concentration:	1.15 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

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 using Rockland's affinity purified anti-PTEN-P1 antibody shows detection at ~55kDa (arrowhead) of endogenous PTEN-P1 in whole cell lysates from human derived cell lines HeLa (p/n W09-000-364) [lane 4], HEK293 (p/n W09-000-365) [lane 5] and MCF7 (p/n W09-000-360) [lane 6]. Lanes 1-3 were show the results of staining after the antibody was first pre-incubated with the immunizing peptide. The identity of lower molecular weight bands in lane 4 is unknown. Briefly, each lane contains approximately 35µg of lysate. Primary antibody was used at a 1:500 dilution in 5% BLOTTO in PBS reacted overnight at 4°C. The membrane was washed and reacted with a 1:10,000 dilution of IRDye800™ conjugated Gt-a-Rabbit IgG [H&L] MX (p/n 611-132-122) for 45 min at room temperature (800 nm channel, green). Molecular weight estimation was made by comparison to prestained MW markers in lane M (700 nm channel, red). IRDye™800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

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