

Certificate of Analysis
Product: Affinity Purified Anti-PTEN-P1 [Rabbit]

Code: 600-401-A90

Lot # 20642

Size: 100 µg

Physical State: Liquid (sterile filtered)

Antibody Concentration: 0.73 mg/ml (by UV absorbance at 280 nm)

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer: None

Preservative: 0.01% (w/v) Sodium Azide

Storage Conditions: Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening. -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening.

Background Information: 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.

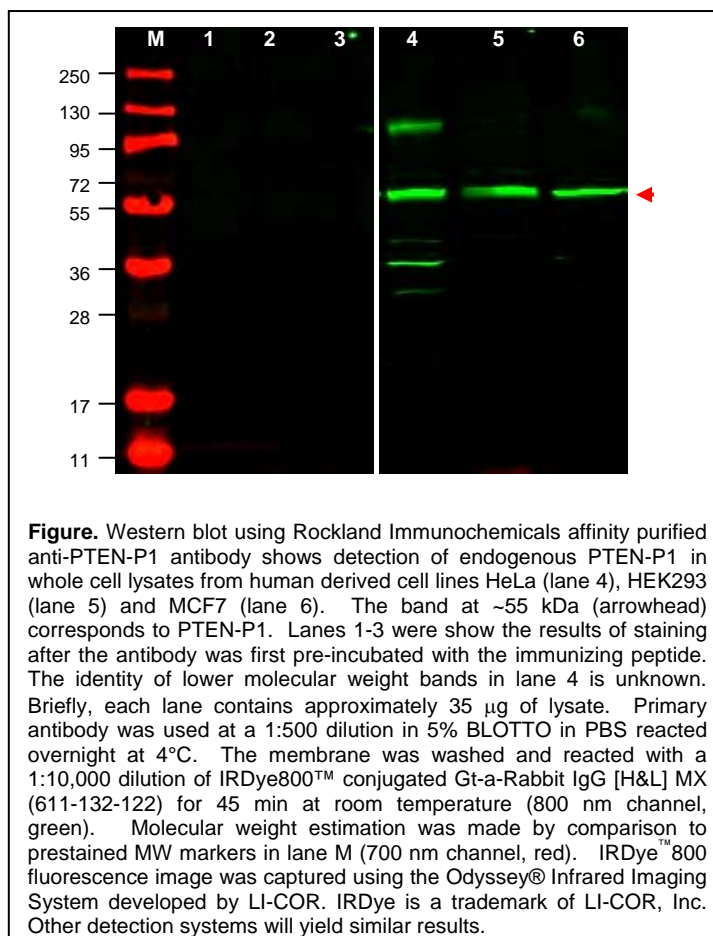
Application Note(s): This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 55 kDa in size corresponding to PTEN-P1 protein by western blotting in the appropriate cell lysate or extract.

Recommended Dilutions:

ELISA	1:160,000
WESTERN BLOT	1:500 to 1:2,000
IMMUNOPRECIPITATION	User Optimized
IF MICROSCOPY	User Optimized
OTHER APPLICATIONS	User Optimized

Purity and Specificity: This affinity-purified antibody is directed against human PTEN-P1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. Reactivity occurs against human PTEN-P1 protein. A BLAST analysis was used to suggest cross reactivity with PTEN proteins from mouse, dog, macaque, chimpanzee, rat, opossum, zebrafish, green pufferfish, and platypus sources based on 100% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.

Relevant Link(s): Swiss Prot: [O43460](#) NCBI Link [NP_000305](#) See also [AAH38293](#)



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.

Related Products:

#600-401-A90	Affinity Purified Anti-PTEN-P1 [Rabbit]
#600-401-859	Affinity Purified Anti-Human PTEN-P1 pS29/pT32 [Rabbit]
#611-703-127	Peroxidase Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (DONKEY) MX10
#611-132-122	IRDye® 800 Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10
#611-144-122	DyLight™680 Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10
#B501-0500	BLOTTO (500 g)
#BSA-30	30% BOVINE SERUM ALBUMIN SOL'N in 0.85% sodium chloride (no preservative or stabilizer) (500 ml)
#B304	NORMAL GOAT SERUM (NGS) (10 ml)
#KIA-003	MaxTag™ Anti-RABBIT IgG Kit for Immunoblotting
#MB-070	Blocking Buffer for Fluorescent Western Blotting

General References:

Phillips,R.J., Mestas,J., Gharaee-Kermani,M., Burdick,M.D., Sica,A., Belperio,J.A., Keane,M.P. and Strieter,R.M. (2005) Epidermal growth factor and hypoxia-induced expression of CXC chemokine receptor 4 on non-small cell lung cancer cells is regulated by the phosphatidylinositol 3-kinase/PTEN/AKT/mammalian target of rapamycin signaling pathway and activation of hypoxia inducible factor-1 alpha. *J. Biol. Chem.* **280** (23), 22473-22481.

Baak,J.P., Van Diermen,B., Steinbakk,A., Janssen,E., Skaland,I., Mutter,G.L., Fiane,B. and Lovslett,K. (2005) Lack of PTEN expression in endometrial intraepithelial neoplasia is correlated with cancer progression. *Hum. Pathol.* **36** (5), 555-561.

Steck,P.A., Pershouse,M.A., Jasser,S.A., Yung,W.K., Lin,H., Ligon,A.H., Langford,L.A., Baumgard,M.L., Hattier,T., Davis,T., Frye,C., Hu,R., Swedlund,B., Teng,D.H. and Tavtigian,S.V. (1997) Identification of a candidate tumour suppressor gene, MMAC1, at chromosome 10q23.3 that is mutated in multiple advanced cancers. *Nat. Genet.* **15** (4), 356-362.

Li,J., Yen,C., Liaw,D., Podsypanina,K., Bose,S., Wang,S.I., Puc,J., Miliareis,C., Rodgers,L., McCombie,R., Bigner,S.H., Giovanella,B.C., Ittmann,M., Tycko,B., Hibshoosh,H., Wigler,M.H. and Parsons,R. (1997) PTEN, a putative protein tyrosine phosphatase gene mutated in human brain, breast, and prostate cancer. *Science* **275** (5308), 1943-1947.

Kim S.K., Su L.K., Oh Y., Kemp B.L., Hong W.K., Mao L. (1998) Alterations of PTEN/MMAC1, a candidate tumor suppressor gene, and its homologue, PTH2, in small cell lung cancer cell lines. *Oncogene* **16**:89-93.

Note: 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 326, Gilbertsville, Pennsylvania, USA.