

PTEN (Phospho-Ser370) Polyclonal Antibody

ORDERING INFORMATION

Catalog No.: 43062

Format: 100ul at 1.0mg/ml in PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Affinity-purified on phosphopeptide; non-phosphopeptide-reactive antibodies were removed by chromatography on non-phosphorylated peptide.

BACKGROUND

Phosphatase and tensin homolog (PTEN) was identified as a tumor suppressor that is mutated in many cancers. PTEN is a phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase. It contains a tensin-like domain as well as a catalytic domain similar to the dual specificity protein tyrosine phosphatases. Unlike most protein tyrosine phosphatases, PTEN 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.

SPECIFICATION SUMMARY

Antigen: Peptide sequence that includes phosphorylation site of serine 370 (D-V-S(p)-D-N) derived from human PTEN and conjugated to KLH.

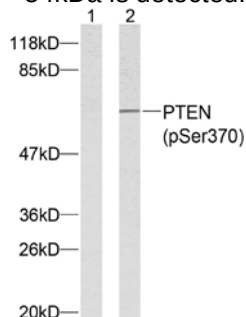
Host Species: Rabbit

Specificity: This antibody detects endogenous human, mouse, and rat PTEN only when phosphorylated at serine 370.

Accession no.: P60484, NP_000305.3

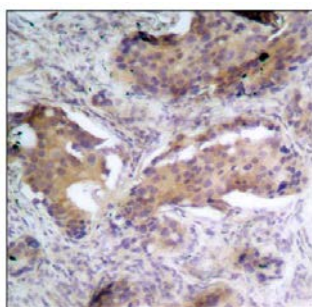
APPLICATIONS

Immunoblotting: use at dilution of 1:500-1:1,000. A band of ~54kDa is detected.



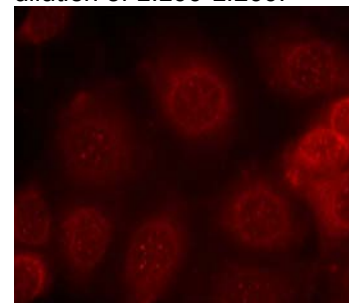
Detection of PTEN (phospho-Ser370) in extracts of HeLa cells.

Immunohistochemistry: use at dilution of 1:50-1:100.



Detection of PTEN (phospho-Ser370) in paraffin-embedded human breast carcinoma tissue.

Immunofluorescence: use at dilution of 1:100-1:200.



Detection of PTEN (phospho-Ser370) in methanol-fixed MEF cells.

These are recommended working dilutions. Enduser should determine optimal dilutions for their application.

DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Can be stored at 4°C for short-term.
For in vitro investigational use only. Not intended for therapeutic or diagnostic applications.