

## PTEN (Phospho-Ser380/Thr382/Thr383) Polyclonal Antibody

### ORDERING INFORMATION

**Catalog No.:** 43056

**Format:** 100ul at 1.0mg/ml in PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), 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 380/threonine 382/threonine 383 derived from human PTEN and conjugated to KLH.

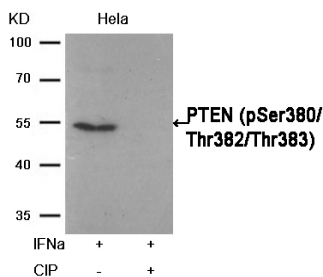
**Host Species:** Rabbit

**Specificity:** This antibody detects endogenous human, mouse, and rat PTEN only when phosphorylated at serine 380 and threonine 382/383.

**Accession no.:** P60484, NP\_000305.3

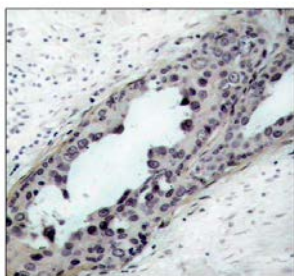
### APPLICATIONS

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



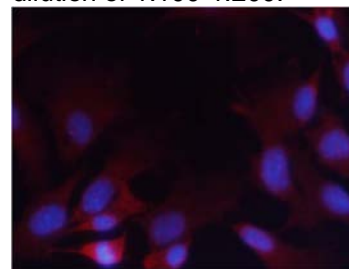
Detection of PTEN (phospho-Ser380/Thr382/Thr383) in extracts of HeLa cells treated with IFN $\alpha$  or calf intestinal phosphatase.

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



Detection of PTEN (phospho-Ser380/Thr382/Thr383) in paraffin-embedded human breast carcinoma tissue.

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



Detection of PTEN (phospho-Ser380/Thr382/Thr383) 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.*