

PTEN (phospho Ser370) rabbit pAb

Cat No.: ES1398

For research use only

Overview

Product Name PTEN (phospho Ser370) rabbit pAb

Host species Rabbit

Applications WB;IHC;IF;ELISA **Species Cross-Reactivity** Human;Mouse;Rat

Recommended dilutions Western Blot: 1/500 - 1/2000.

Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.

Immunogen The antiserum was produced against synthesized

peptide derived from human PTEN around the

phosphorylation site of Ser370. AA range:355-385 Phospho-PTEN (S370) Polyclonal Antibody detects

Specificity Phospho-PTEN (S370) Polyclonal Antibody detects

endogenous levels of PTEN protein only when

phosphorylated at S370.

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and

0.02% sodium azide.

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name Phosphatidylinositol 3,4,5-trisphosphate

3-phosphatase and dual-specificity protein

phosphatase PTEN

Gene Name PTEN

Cytoplasm . Nucleus . Nucleus, PML body .

Monoubiquitinated form is nuclear.

Nonubiquitinated form is cytoplasmic. Colocalized

with PML and USP7 in PML nuclear bodies (PubMed:18716620). XIAP/BIRC4 promotes its nuclear localization (PubMed:19473982). .; [I The antibody was affinity-purified from rabbit

antiserum by affinity-chromatography using

epitope-specific immunogen.

Clonality Polyclonal Concentration 1 mg/ml

Observed band

Purification

Human Gene ID 5728



+86-27-59760950 ELKbio@ELKbiotech.com www.elkbiotech.com



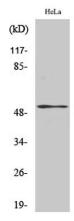
Human Swiss-Prot Number Alternative Names

P60484

PTEN; MMAC1; TEP1; Phosphatidylinositol 3; 4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN; Mutated in multiple advanced cancers 1; Phosphatase and tensin homolog

Background

This gene was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. The protein encoded by this gene is a phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase. It contains a tensin 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. The use of a non-canonical (CUG) upstream initiation site produces a longer isoform that initiates translation with a leucine, and is thought to be preferentially associated with the mitochondrial inner membrane.

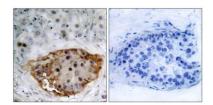


Western Blot analysis of various cells using Phospho-PTEN (S370) Polyclonal Antibody

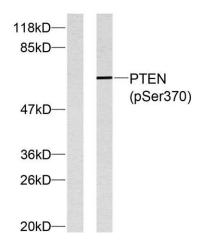
This longer isoform may help regulate ener







Immunohistochemistry analysis of paraffin-embedded human breast cancer, using PTEN (Phospho-Ser370) Antibody. The picture on the right is blocked with the PTEN (Phospho-Ser370) peptide.



+86-27-59760950

Western blot analysis of PTEN (Phospho-Ser370)
Antibody. The lane on the right is blocked with the PTEN (Phospho-Ser370) peptide.

