

PTEN (Acetyl Lys402) rabbit pAb

Cat No.:ES1128

For research use only

Overview

Product Name PTEN (Acetyl Lys402) rabbit pAb

Host species Rabbit

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

Recommended dilutions WB 1:500-2000; IHC-p 1:50-300; ELISA 2000-20000

Immunogen Synthesized acetyl-peptide derived from the human

Specificity Acetyl-PTEN (K402) Polyclonal AntibodySynthesized

peptide derived from the human PTEN around the

PTEN around the acetylation site of K402.

acetylation site of K402.

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

Purification

Cellular localization 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 47kD
Human Gene ID 5728
Human Swiss-Prot Number P60484

Alternative Names PTEN; MMAC1; TEP1; Phosphatidylinositol

3,4,5-trisphosphate 3-phosphatase and



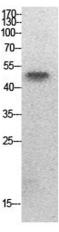
+86-27-59760950 ELKbio@ELKbiotech.com



Background

dual-specificity protein phosphatase PTEN; Mutated in multiple advanced cancers 1; Phosphatase and tensin homolog

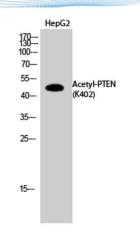
This gene was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. The protein encoded by this gene is a phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase. It contains a tensin like domain as well as a catalytic domain similar to that of the dual specificity 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. This longer isoform may help regulate ener



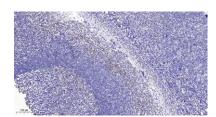
Western Blot analysis of HepG2 cells using Acetyl-PTEN (K402) Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000







Western Blot analysis of HepG2 cells using Acetyl-PTEN (K402) Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).

