



PTEN (phospho Ser385) rabbit pAb

Cat#: orb769758 (Manual)

For research use only. Not intended for diagnostic use.

Product Name PTEN (phospho Ser385) rabbit pAb

Host species Rabbit

Applications IHC;IF;ELISA

Species Cross-Reactivity Human; Mouse; Rat

Recommended dilutions 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 Ser385. AA range:370-400

Specificity Phospho-PTEN (S385) Polyclonal Antibody detects endogenous levels of

PTEN protein only when phosphorylated at S385.

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

Cellular localization Cytoplasm . Nucleus . Nucleus , PML body . Monoubiquitinated form is

USP7 in PML nuclear bodies (PubMed:18716620). XIAP/BIRC4 promotes its nuclear localization (PubMed:19473982). .; [Isoform alpha]: Secreted . May be secreted via a classical signal peptide and reenter into cells with the

help of a poly-Arg motif.





Purification The antibody was affinity-purified from rabbit antiserum by affinity-

epitope-specific immunogen. chromatography using

Polyclonal **Clonality**

Concentration 1 mg/ml

Observed band

Human Gene ID 5728

Human Swiss-Prot Number P60484

PTEN; MMAC1; TEP1; Phosphatidylinositol 3; 4,5-trisphosphate 3-**Alternative Names**

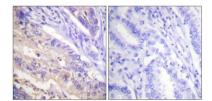
phosphatase and dual-specificity protein phosphatase PTEN; Mutated in multiple advanced cancers 1; Phosphatase and tensin homolog

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. This longer isoform may help regulate ener



Immunohistochemistry analysis of paraffin-embedded human breast cancer, using PTEN (Phospho-Ser385) Antibody. The picture on the right is blocked with the PTEN (Phospho-Ser385) peptide.