



PTEN (phospho Ser380) rabbit pAb

Cat No.:ES6885

For research use only

Overview

Product Name	PTEN (phospho Ser380) rabbit pAb
Host species	Rabbit
Applications	IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human PTEN around the phosphorylation site of Ser380. AA range:366-395
Specificity	Phospho-PTEN (S380) Polyclonal Antibody detects endogenous levels of PTEN protein only when phosphorylated at S380.
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 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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	55kD
Human Gene ID	5729
Human Swiss-Prot Number	P60484





Alternative Names

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. This longer isoform may help regulate ener

Immunohistochemistry analysis of paraffin-embedded human breast cancer, using PTEN (Phospho-Ser380) Antibody. The picture on the right is blocked with the PTEN (Phospho-Ser380) peptide.

