



## PTEN (phospho Ser380/T382/T383) rabbit pAb

Cat#: orb769757 (Manual)

For research use only. Not intended for diagnostic use.

Product Name PTEN (phospho Ser380/T382/T383) 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:

1/20000. Not yet tested in other applications.

Immunogen The antiserum was produced against synthesized peptide derived from

human PTEN around the phosphorylation site of Ser380/Thr382/Thr383.

AA range:370-400

Specificity Phospho-PTEN (S380/T383) Polyclonal Antibody detects endogenous

levels of PTEN protein only when phosphorylated at S380/T382/T383.

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). .; [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** 53kD

**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 phosphonositide 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

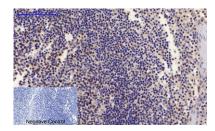
mitochondrial inner membrane. This longer isoform may help regulate ener

Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1,PTEN (phospho Ser380/T382/T383) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

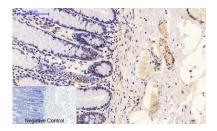




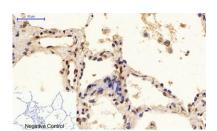
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Immunohistochemical analysis of paraffin-embedded Human-Tonsil tissue. 1,PTEN (phospho Ser380/T382/T383) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human-colon tissue. 1,PTEN (phospho Ser380/T382/T383) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human-lung tissue. 1,PTEN (phospho Ser380/T382/T383) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.