

# PTEN Rabbit pAb

Catalog No.: A0008

## Basic Information

### Catalog No.

A0008

### Observed MW

54kDa

### Calculated MW

19kDa/47kDa/64kDa

### Category

Primary antibody

### Applications

WB, IHC, IF

### Cross-Reactivity

Human, Mouse, Rat

## Recommended Dilutions

<b>WB</b>	1:500 - 1:2000
<b>IHC</b>	1:50 - 1:200
<b>IF</b>	1:50 - 1:200

## Contact

 | [www.abclonal.com](http://www.abclonal.com)

## 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 energy metabolism in the mitochondria. A pseudogene of this gene is found on chromosome 9. Alternative splicing and the use of multiple translation start codons results in multiple transcript variants encoding different isoforms.

## Immunogen Information

<b>Gene ID</b>	<b>Swiss Prot</b>
5728	P60484

### Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-186 of human PTEN (NP\_000305.3).

### Synonyms

10q23del;BZS;CWS1;DEC;GLM2;MHAM;MMAC1;PTEN1;TEP1;PTEN;PTENbeta

## Product Information

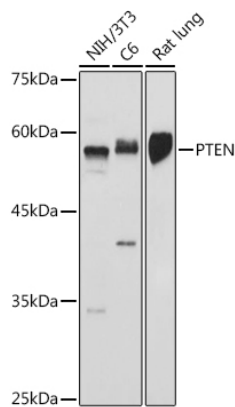
<b>Source</b>	<b>Isotype</b>	<b>Purification</b>
Rabbit	IgG	Affinity purification

### Storage

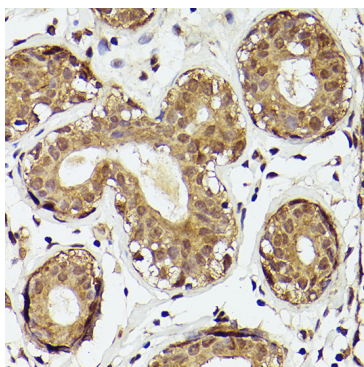
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

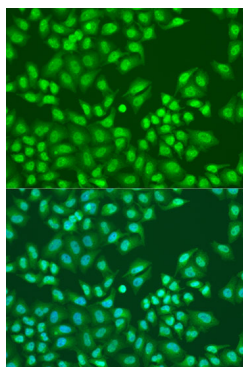
## Validation Data



Western blot analysis of extracts of various cell lines, using PTEN antibody (A0008) at 1:500 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 10s.



Immunohistochemistry of paraffin-embedded human breast cancer using PTEN Rabbit pAb (A0008) at dilution of 1:50 (40x lens).



Immunofluorescence analysis of U2OS cells using PTEN antibody (A0008) at dilution of 1:100. Blue: DAPI for nuclear staining.