

## Recombinant Phospho-PTEN (Ser380) Monoclonal Antibody

catalog number: AN300147L

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

<b>Reactivity</b>	Human
<b>Immunogen</b>	A synthetic phosphopeptide corresponding to residues around Ser380 of the Human Phospho-PTEN
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Clone</b>	4B13
<b>Purification</b>	Protein A
<b>Buffer</b>	10 mM sodium HEPES, 150 mM NaCl, 100 µg/mL protein protectant, 50% glycerol, pH 7.5

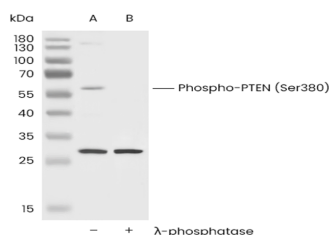
### Applications

### Recommended Dilution

WB

1:500-1:2000

### Data



Western blot analysis of extracts from Hela, untreated (line A); treated with  $\lambda$ -phosphatase (line B) using Phospho-PTEN (Ser380) Monoclonal Antibody at 1:1000 dilution. (We are unsure as to the identity of these extra bands.)

**Observed-MW:27 kDa**

**Calculated-MW:47 kDa**

### Preparation & Storage

#### Storage

This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.

#### Shipping

Ice bag

### Background

### For Research Use Only

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Rev. V1.0

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.