

AP1231

Leader in Biomolecular Solutions for Life Science



## Phospho-PTEN-S380/T382/383 Rabbit pAb

Catalog No.: AP1231

### Basic Information

#### Observed MW

54kDa

#### Calculated MW

47kDa

#### Category

Polyclonal Antibody

#### Applications

WB, IHC-P, ELISA

#### Cross-Reactivity

Human, Mouse, Rat

### 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.

### Recommended Dilutions

WB	1:500 - 1:1000
IHC-P	1:50 - 1:200

### Immunogen Information

#### Gene ID

5728

#### Swiss Prot

P60484

#### Immunogen

A synthetic phosphorylated peptide around S380 & T382 & T383 of human PTEN (NP\_000305.3).

#### Synonyms

BZS; DEC; CWS1; GLM2; MHAM; TEP1; MMAC1; PTEN1; 10q23del; PTENbeta; Phospho-PTEN-S380/T382/383

### Contact



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

### Product Information

#### Source

Rabbit

#### Isotype

IgG

#### Purification

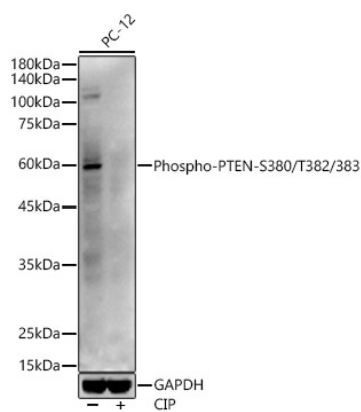
Affinity purification

#### Storage

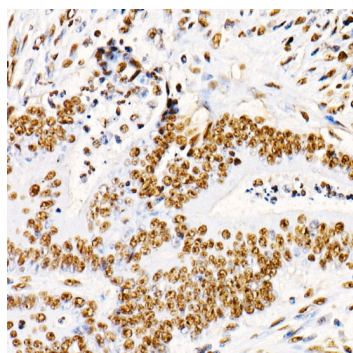
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

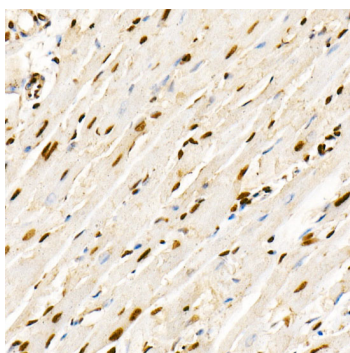
## Validation Data



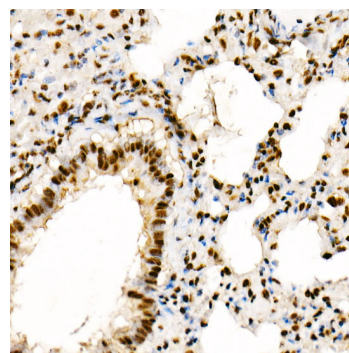
Western blot analysis of PC-12, using Phospho-PTEN-S380/T382/383 Rabbit pAb (AP1231) at 1:1000 dilution. PC-12 cells were treated by CIP (20uL/400ul) at 37°C for 1 hour.  
 Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
 Lysates/proteins: 25ug per lane.  
 Blocking buffer: 3% nonfat dry milk in TBST.  
 Detection: ECL Basic Kit (RM00020).  
 Exposure time: 60s.



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma using Phospho-PTEN-S380/T382/383 Rabbit pAb (AP1231) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffin-embedded mouse heart using Phospho-PTEN-S380/T382/383 Rabbit pAb (AP1231) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffin-embedded rat lung using Phospho-PTEN-S380/T382/383 Rabbit pAb (AP1231) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.