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 |
| ELISA | Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. |

Immunogen Information

| Gene | ID |
|------|----|
| 5728 | |

Swiss Prot P60484

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

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

Contact

Product Information

www.abclonal.com

Source Rabbit **Isotype** IgG **Purification** Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Validation Data



Western blot analysis of lysates from PC-12 cells, 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-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg 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). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse heart using Phospho-PTEN-S380/T382/383 Rabbit pAb (AP1231) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat lung using Phospho-PTEN-S380/T382/383 Rabbit pAb (AP1231) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.