

Phospho-PTEN-S370 Rabbit pAb

Catalog No.: AP0921

Basic Information

Observed MW

Refer to figures

Calculated MW

47kDa

Category

Primary antibody

Applications

ELISA, WB

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 - 1:2000

Immunogen Information

Gene ID

5728

Swiss Prot

P60484

Immunogen

A synthetic phosphorylated peptide around S370 of human PTEN (NP_000305.3).

Synonyms

BZS; DEC; CWS1; GLM2; MHAM; TEP1; MMAC1; PTEN1; 10q23del; PTENbeta; Phospho-PTEN-S370

Contact

 | 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.