PTEN Polyclonal Antibody

Description

Product type	Primary Antibody
Code	BT-AP07473
Host	Rabbit
Isotype	IgG
Size	20ul, 50ul, 100ul
Immunogen	The antiserum was produced against synthesized peptide derived from human PTEN. AA range:370-400
Mol wt	47166
Species reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Recommended application	WB, IHC-p, ELISA
Concentration	1 mg/ml
Full name	PTEN Antibody
Synonyms	PTEN; MMAC1; TEP1; Phosphatidylinositol 3; 4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN; Mutated in multiple advanced cancers 1; Phosphatase and tensin homolog

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

Background

PTEN was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. Pphosphatase and tensin homolog encoded by PTEN 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, t phosphatase and tensin homolog 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 PTEN is found on chromosome 9. Alternative splicing and the use of multiple translation start codons results in multiple transcript variants encoding different isoforms.

Recommended Dilution

WB: 1: 500 - 1: 2000
IHC: 1: 100 - 1: 300
ELISA: 1: 20000
Not yet tested in other applications.

Images

No images.

Storage

-20°C for one year