

PTEN Polyclonal Antibody

Description

Product type	Primary Antibody
Code	BT-AP07470
Host	Rabbit
Isotype	IgG
Size	20ul, 50ul, 100ul
Immunogen	The antiserum was produced against synthesized peptide derived from human PTEN. AA range:355-385
Mol wt	47166
Species reactivity	Human, Mouse, Rat, Monkey
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. Phosphatase 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, 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

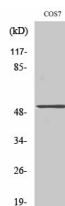
WB: 1: 500 - 1: 2000

IHC: 1: 100 - 1: 300

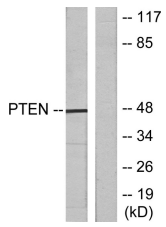
ELISA: 1: 10000

Not yet tested in other applications.

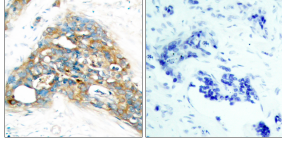
Images



Western Blot analysis of various cells using PTEN Polyclonal Antibody



Western blot analysis of PTEN (Ab-370) Antibody. The lane on the right is blocked with the PTEN (Ab-370) peptide.



Immunohistochemistry analysis of paraffin-embedded human breast cancer, using PTEN (Ab-370) Antibody. The picture on the right is blocked with the PTEN (Ab-370) peptide.

Storage

-20°C for one year

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