

# PTEN Polyclonal Antibody

#### Description

Product type Primary Antibody

Code BT-AP07472

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, IF, 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

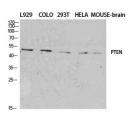
PTEN was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. Pphosphatase and tensin homolog encoded by PTEN is a phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase. It contains a tensin like domain as well as a catalytic domain similar to that of the 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**

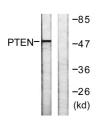
WB: 1: 500 - 1: 2000 IHC: 1: 100 - 1: 300 IF: 1: 200 - 1: 1000 ELISA: 1: 40000

Not yet tested in other applications.

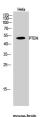
### Images



Western Blot analysis of various cells using PTEN Polyclonal Antibody diluted at 1:1000



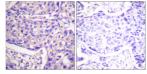
Western blot analysis of PTEN (Ab-385) Antibody. The lane on the right is blocked with the PTEN (Ab-385) peptide.



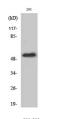
Western Blot analysis of Hela cells using PTEN Polyclonal Antibody diluted at 1:1000



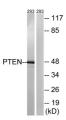
Western blot analysis of mouse-brain lysis using PTEN antibody. Antibody was diluted at 1:1000



 $Immunohistochemistry\ analysis\ of\ paraffin-embedded\ human\ breast\ cancer,\ using\ PTEN\ (Ab-385)$  Antibody. The picture on the right is blocked with the PTEN (Ab-385) peptide.



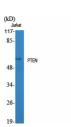
Western Blot analysis of 293 cells using PTEN Polyclonal Antibody diluted at 1:1000



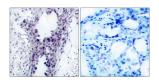
Western blot analysis of PTEN (Ab-380/382/383) Antibody. The lane on the right is blocked with the PTEN (Ab-380/382/383) peptide.



Western blot analysis of mouse-brain lysis using PTEN antibody. Antibody was diluted at 1:1000



Western Blot analysis of various cells using PTEN Polyclonal Antibody diluted at 1:1000



 $Immun ohistochemistry\ analysis\ of\ paraffin-embedded\ human\ breast\ cancer,\ using\ PTEN\ (Ab-380/382/383)\ Antibody.\ The\ picture\ on\ the\ right\ is\ blocked\ with\ the\ PTEN\ (Ab-380/382/383)\ peptide.$ 

## Storage

-20°C for one year

501 Changsheng S Rd, Nanhu Dist, Jiaxing, Zhejiang, China Tel: 86 21 31007137 | E-mail: save@bt-laboratory.com | www.bt-laboratory.com