

## PTEN Polyclonal Antibody

## Description

Product type Primary Antibody

Code BT-AP07469

Host Rabbit

Isotype IgG

Size 20ul, 50ul, 100ul

Immunogen Synthesized peptide derived from PTEN at AA range: 251-300

Mol wt 47166

Species reactivity Human, Mouse, Rat

**Clonality** Polyclonal

Recommended application IF, WB, IHC-p, ELISA

Concentration 1 mg/ml

Full name PTEN Antibody

Synonyms phosphatase and tensin homolog; phosphatase and tensin homolog pseudogene 1

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

## Background

PTEN (phosphatase and tensin homolog) was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. The protein 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, 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 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

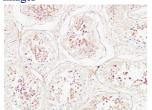
WB: 1: 500 - 2000

ELISA: 1: 10000 - 20000

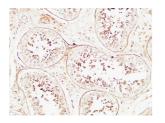
IHC-p: 100 - 300 IF: 1: 50 - 200

Not yet tested in other applications.

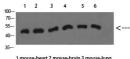
Images



Immunohistochemical analysis of paraffin-embedded Human testis. 1, Antibody was diluted at  $1:200(4^{\circ} \text{ overnight})$ . 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

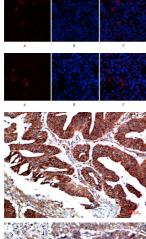


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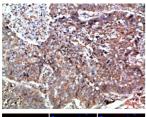


4,Hela 5,KB 6,SH-SY5Y

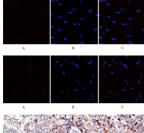
Western Blot analysis of mouse-heart mouse-brain mouse-lung Hela KB SH-SY5Y cells using PTEN Polyclonal Antibody diluted at 1:1000. Secondary antibody was diluted at 1:20000



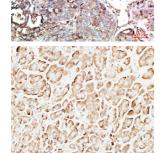
Immunofluorescence analysis of rat-spleen tissue. 1,PTEN Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B Immunofluorescence analysis of rat-spleen tissue. 1,PTEN Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B Immunohistochemical analysis of paraffin-embedded human-colon-cancer, antibody was diluted at 1:200



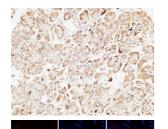
 $Immun ohistochemical \ analysis \ of paraffin-embedded \ human-lung-cancer, antibody \ was \ diluted \ at 1:200$ 



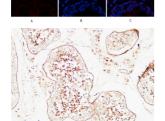
Immunofluorescence analysis of human-heart tissue. 1,PTEN Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B Immunofluorescence analysis of human-heart tissue. 1,PTEN Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B Immunohistochemical analysis of paraffin-embedded human-lung-cancer, antibody was diluted at 1:200



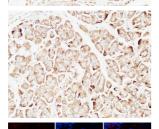
Immunohistochemical analysis of paraffin-embedded Human pancreas. 1, Antibody was diluted at 1:200(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



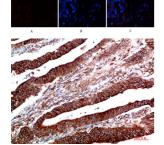
Immunohistochemical analysis of paraffin-embedded Human pancreas. 1, Antibody was diluted at 1:200(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunofluorescence analysis of human-lung tissue. 1,PTEN Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B Immunohistochemical analysis of paraffin-embedded Human testis. 1, Antibody was diluted at 1:200(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



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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