

# PTEN Rabbit Polyclonal Antibody



CAB2113

## Product Information

### Size:

20uL, 50uL, 100uL, 200uL

### Observed MW:

### Calculated MW:

19kDa/47kDa/64kDa

### Applications:

IHC IF

### Reactivity:

Human, Mouse, Rat

## Antibody Information

### Recommended dilutions:

IHC 1:50 - 1:200 IF 1:50 - 1:200

### Source:

Rabbit

### Isotype:

IgG

### Purification:

Affinity purification

## Protein 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.

## Immunogen information

### Gene ID:

5728

### Uniprot

P60484

### Synonyms:

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

### Immunogen:

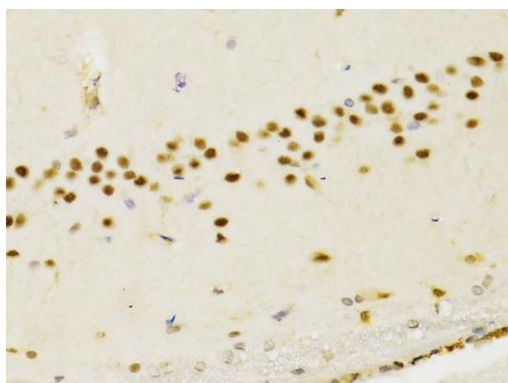
Recombinant fusion protein containing a sequence corresponding to amino acids 190-304 of human PTEN (NP\_000305.3).

### Storage:

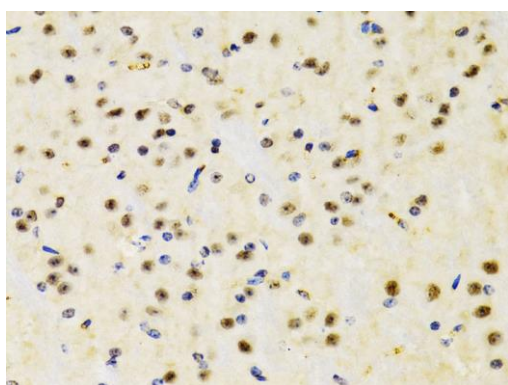
Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

## Product Images

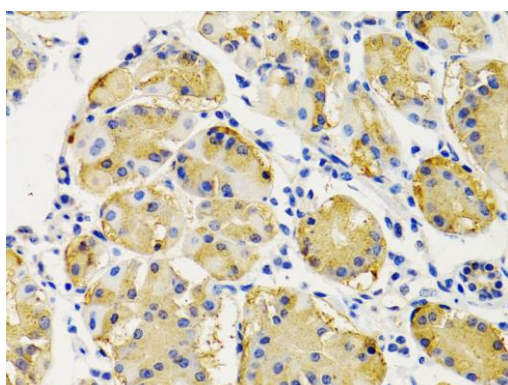
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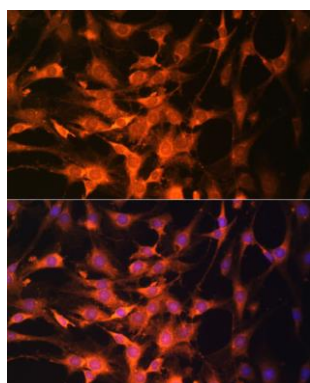
Immunohistochemistry of paraffin-embedded rat brain using PTEN antibody (CAB2113) at dilution of 1:200 (40x lens).



Immunohistochemistry of paraffin-embedded mouse brain using PTEN antibody (CAB2113) at dilution of 1:200 (40x lens).



Immunohistochemistry of paraffin-embedded human stomach using PTEN antibody (CAB2113) at dilution of 1:200 (40x lens).



Immunofluorescence analysis of C6 cells using PTEN antibody (CAB2113) at dilution of 1:100. Blue: DAPI for nuclear staining.