

A2113

Leader in Biomolecular Solutions for Life Science



## PTEN Rabbit pAb

Catalog No.: A2113

3 Publications

### Basic Information

#### Observed MW

#### Calculated MW

47kDa

#### Category

Polyclonal Antibody

#### Applications

IHC-P,IF,ICC,ELISA

#### Cross-Reactivity

Human,Mouse,Rat

### 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.

### Recommended Dilutions

IHC-P 1:50 - 1:200

IF/ICC 1:50 - 1:200

**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

### Immunogen Information

#### Gene ID

5728

#### Swiss Prot

P60484

#### Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

#### Synonyms

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

### Contact

 [www.abclonal.com](http://www.abclonal.com)

### Product Information

#### Source

Rabbit

#### Isotype

IgG

#### Purification

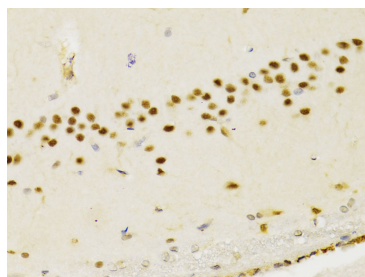
Affinity purification

#### Storage

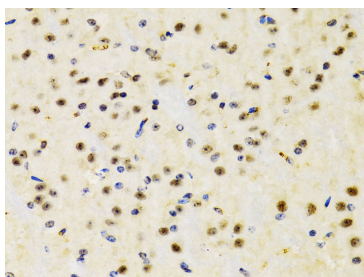
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

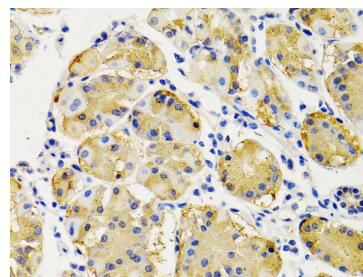
## Validation Data



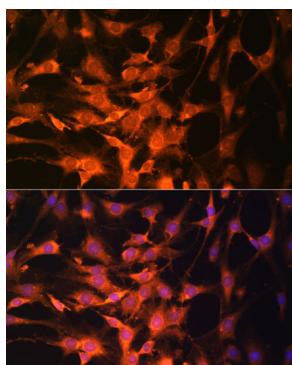
Immunohistochemistry analysis of paraffin-embedded Rat brain using PTEN Rabbit pAb (A2113) at dilution of 1:200 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



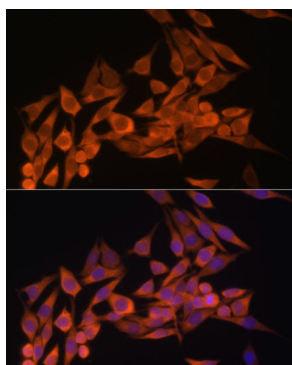
Immunohistochemistry analysis of paraffin-embedded Mouse brain using PTEN Rabbit pAb (A2113) at dilution of 1:200 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



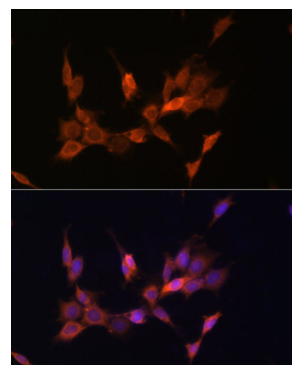
Immunohistochemistry analysis of paraffin-embedded Human stomach using PTEN Rabbit pAb (A2113) at dilution of 1:200 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunofluorescence analysis of C6 cells using PTEN Rabbit pAb (A2113) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using PTEN Rabbit pAb (A2113) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using PTEN Rabbit pAb (A2113) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.