

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

Immunogen Information

Gene ID

5728

Swiss Prot

P60484

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 190-304 of human PTEN (NP_000305.3).

Synonyms

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

Contact



www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

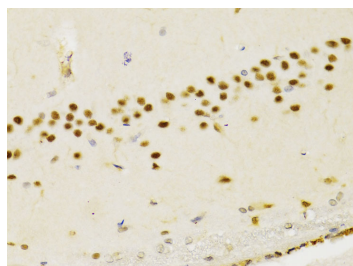
Affinity purification

Storage

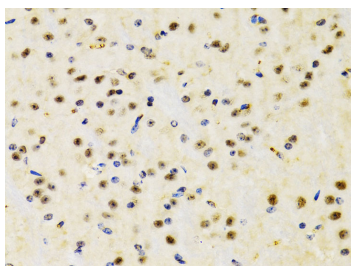
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH 7.3.

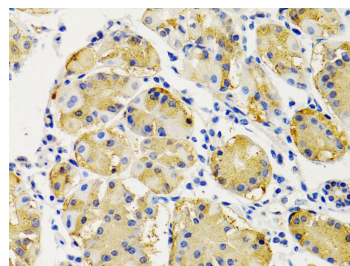
Validation Data



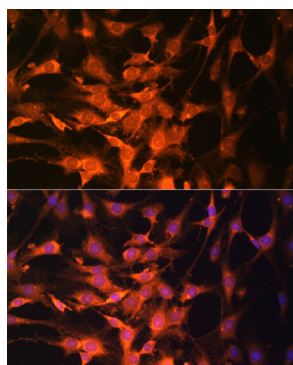
Immunohistochemistry analysis of paraffin-embedded rat brain using PTEN antibody (A2113) at dilution of 1:200 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



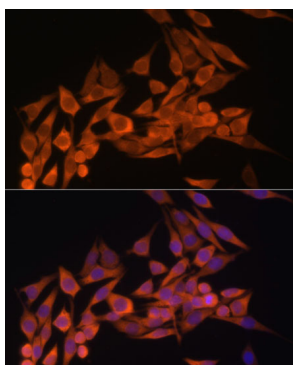
Immunohistochemistry analysis of paraffin-embedded mouse brain using PTEN antibody (A2113) at dilution of 1:200 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



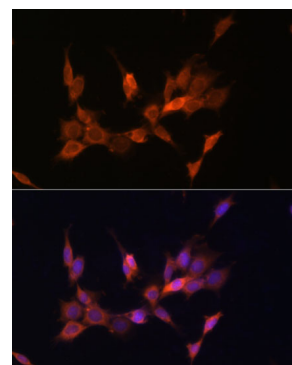
Immunohistochemistry analysis of paraffin-embedded human stomach using PTEN antibody (A2113) at dilution of 1:200 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



Immunofluorescence analysis of C6 cells using PTEN antibody (A2113) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using PTEN antibody (A2113) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using PTEN antibody (A2113) at dilution of 1:100. Blue: DAPI for nuclear staining.