

A11193

Leader in Biomolecular Solutions for Life Science



PTEN Rabbit pAb

Catalog No.: A11193

19 Publications

Basic Information

Observed MW

54kDa

Calculated MW

47kDa

Category

Polyclonal Antibody

Applications

WB, 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

WB	1:500 - 1:1000
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 1-200 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

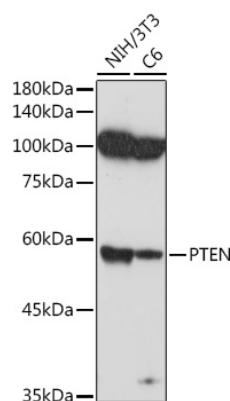
Affinity purification

Storage

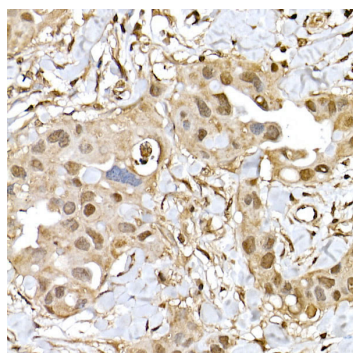
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300, 50% glycerol, pH7.3.

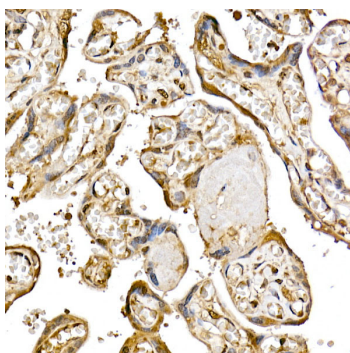
Validation Data



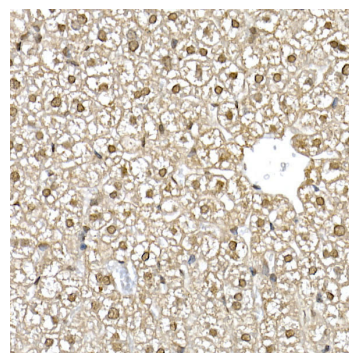
Western blot analysis of various lysates using PTEN Rabbit pAb (A11193) at 1:1000 dilution.
 Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 90s.



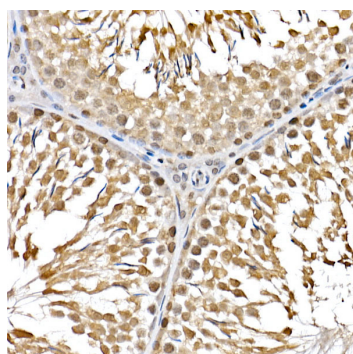
Immunohistochemistry analysis of PTEN in paraffin-embedded human breast cancer using PTEN Rabbit pAb (A11193) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



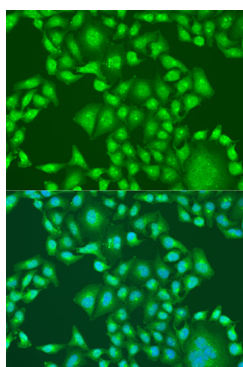
Immunohistochemistry analysis of PTEN in paraffin-embedded human placenta using PTEN Rabbit pAb (A11193) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of PTEN in paraffin-embedded mouse liver using PTEN Rabbit pAb (A11193) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of PTEN in paraffin-embedded rat testis using PTEN Rabbit pAb (A11193) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunofluorescence analysis of U2OS cells using PTEN Rabbit pAb (A11193) at dilution of 1:100. Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.