Anti-PTEN Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P100814

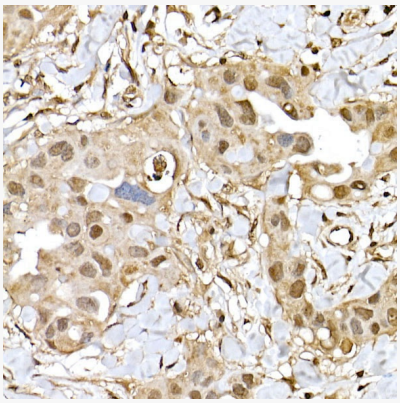
Product Information

Application	WB, IHC-P, IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:500~1:1000; IHC-P 1:50~1:200; IF 1:50~1:200
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-200 of human PTEN (NP_000305.3).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-PTEN Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

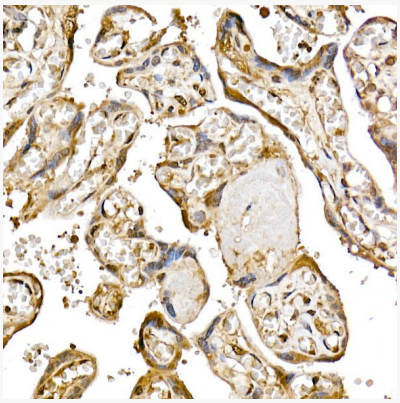
Protein Information

Synonyms	BZS; DEC; CWS1; GLM2; MHAM; TEP1; MMAC1; PTEN1; 10q23del; PTENbeta; PTEN.
Calculated MW	Calculated MW: 47 kDa; Observed MW: 54 kDa
Uniprot ID	P60484
Gene ID	5728
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.

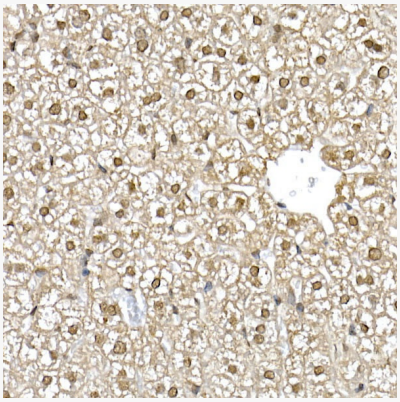
Validation Images



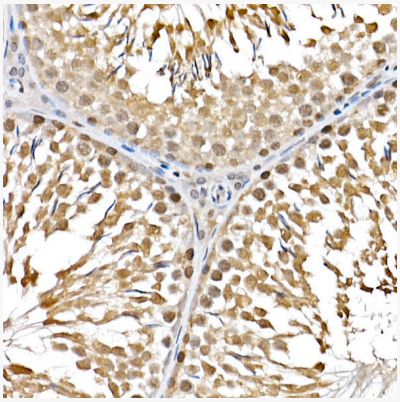
Immunohistochemistry analysis of paraffin-embedded Human breast cancer using PTEN Rabbit pAb (P100814) at dilution of 1:200 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



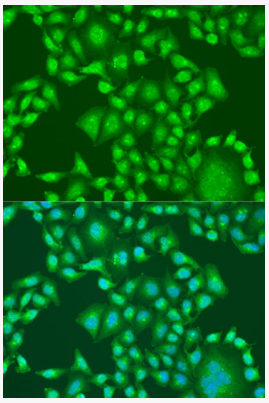
Immunohistochemistry analysis of paraffin-embedded Human placenta using PTEN Rabbit pAb (P100814) at dilution of 1:200 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



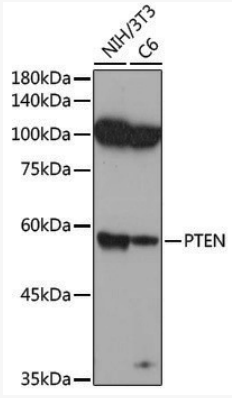
Immunohistochemistry analysis of paraffin-embedded Mouse liver using PTEN Rabbit pAb (P100814) at dilution of 1:200 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat testis using PTEN Rabbit pAb (P100814) at dilution of 1:200 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunofluorescence analysis of U2OS cells using PTEN Rabbit pAb (P100814) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Western blot analysis of various lysates using PTEN Rabbit pAb (P100814) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 90s.