# Anti-PTEN Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P104711

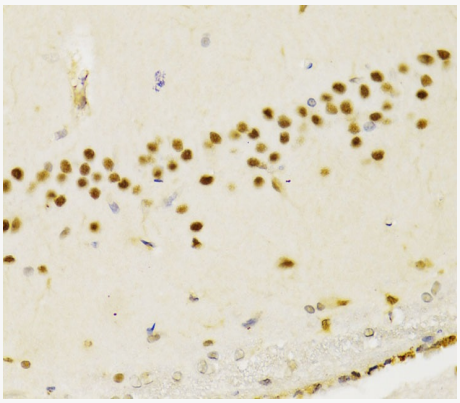
## Product Information

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| Application | IHC-P, IF (Cell)/ICC, ELISA |
| Reactivity | Human, Mouse, Rat |
| Dilution | 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 190-304 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. |

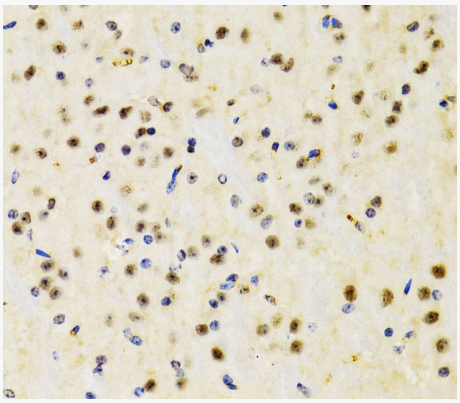
## Protein Information

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|---|---|
| Synonyms | BZS; DEC; CWS1; GLM2; MHAM; TEP1; MMAC1; PTEN1; 10q23del; PTENbeta; PTEN. |
| Calculated MW | Calculated MW: 47 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. |

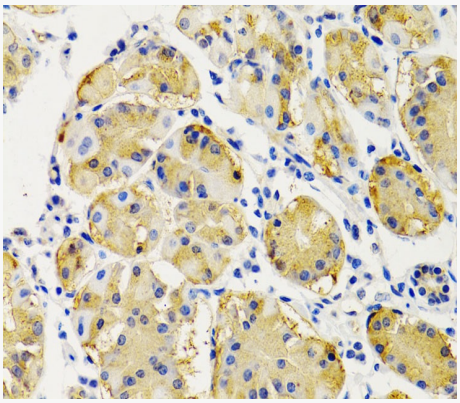
## Validation Images



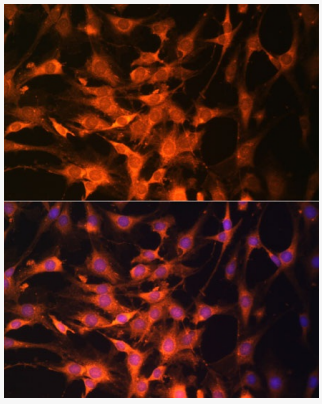
Immunohistochemistry analysis of paraffin-embedded Rat brain using PTEN Rabbit pAb (P104711) at dilution of 1:200 (40× lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



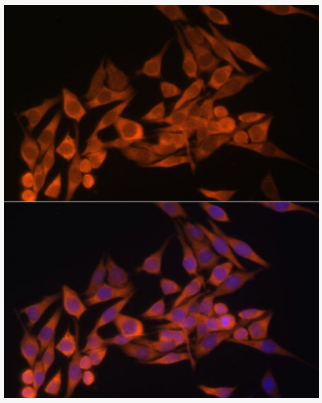
Immunohistochemistry analysis of paraffin-embedded Mouse brain using PTEN Rabbit pAb (P104711) at dilution of 1:200 (40× lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



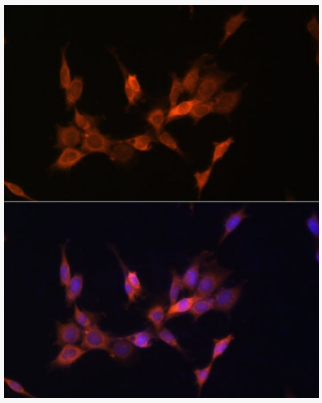
Immunohistochemistry analysis of paraffin-embedded Human stomach using PTEN Rabbit pAb (P104711) at dilution of 1:200 (40× lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunofluorescence analysis of C6 cells using PTEN Rabbit pAb (P104711) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using PTEN Rabbit pAb (P104711) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using PTEN Rabbit pAb (P104711) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.