

PTEN RABBIT PAB

Cat.#: S220182

Product Name: Anti-PTEN Rabbit Polyclonal Antibody

Synonyms: BZS; DEC; CWS1; GLM2; MHAM; TEPI; MMAC1; PTEN1; 10q23del; PTENbeta

UNIPROT ID: P60484 (Gene Accession - NP_000305)

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.

Immunogen: Synthetic peptide of human PTEN

Applications: ELISA, WB, IHC

Recommended Dilutions: IHC: 50-200;WB: 500-2000;ELISA: 5000-10000

Host Species: Rabbit

Clonality: Rabbit Polyclonal

Isotype: Immunogen-specific rabbit IgG

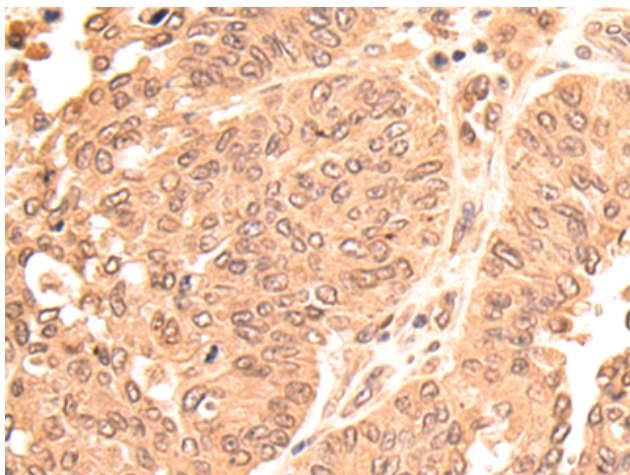
Purification: Antigen affinity purification

Species Reactivity: Human, Mouse, Rat

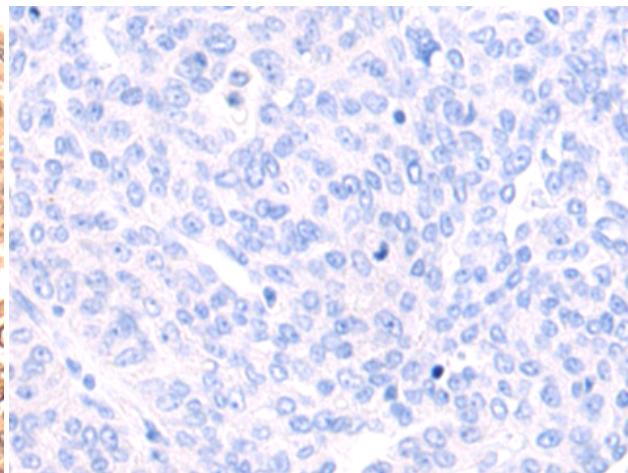
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

Research Areas: Signal Transduction, Epigenetics and Nuclear Signaling, Cancer, Metabolism

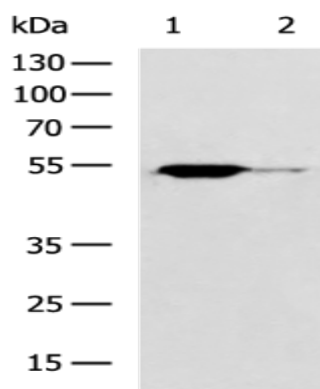
Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



Immunohistochemistry analysis of paraffin embedded Human ovarian cancer tissue using 220182 (PTEN Antibody) at a dilution of 1/50 (Cytoplasm and Nucleus).



In comparison with the IHC on the left, the same paraffin-embedded Human ovarian cancer tissue is first treated with the synthetic peptide and then with 220182 (Anti-PTEN Antibody) at dilution 1/50.



Gel: 8% SDS-PAGE, Lysate: 40 μ g;
Lane 1-2: Mouse brain tissue, MCF-7 cell lysates ;
Primary antibody: 220182 (PTEN Antibody) at dilution 1/800;
Secondary antibody: HRP-conjugated Goat anti rabbit IgG at 1/5000 dilution;
Exposure time: 5 minutes