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PTEN Polyclonal Antibody

(Catalog # A70926)

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.

Description
PTEN Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation
Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

Specificity
Human, Mouse, Rat

Isotype
IgG

Uniprot ID
P60484

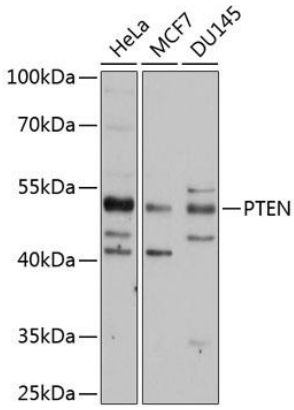
Purification
Affinity Purified

Immunogen
Recombinant fusion protein containing a sequence corresponding to amino acids 1-186 of human PTEN (NP_000305.3)

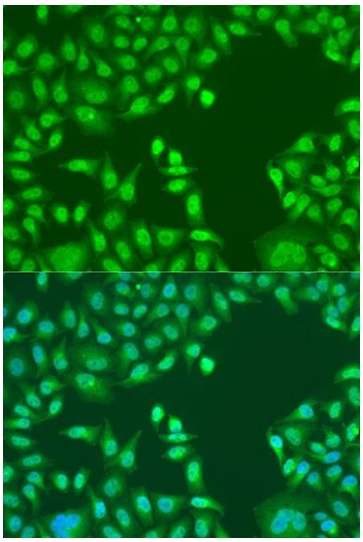
Storage
Shipped at 4°C. Upon receipt, store at -20°C. Avoid freeze / thaw cycles

Alternative Names
PTEN; 10q23del; BZS; CWS1; DEC; GLM2; MHAM; MMAC1; PTEN1; TEP1; PTENbeta; phosphatase and tensin homolog

Application
WB, IF; Recommended dilution: WB: 1:500-1:2000, IF:1:50-1:200



Western blot analysis of extracts of various cell lines, using PTEN Polyclonal Antibody at 1:1000 dilution.
Secondary Antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution.
Lysates/proteins: 25ug per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Exposure time: 30s.



Immunofluorescence analysis of U2OS cells using PTEN Polyclonal Antibody at dilution of 1:100. Blue: DAPI for nuclear staining.

