PTEN Antibody

Catalog No: #24314
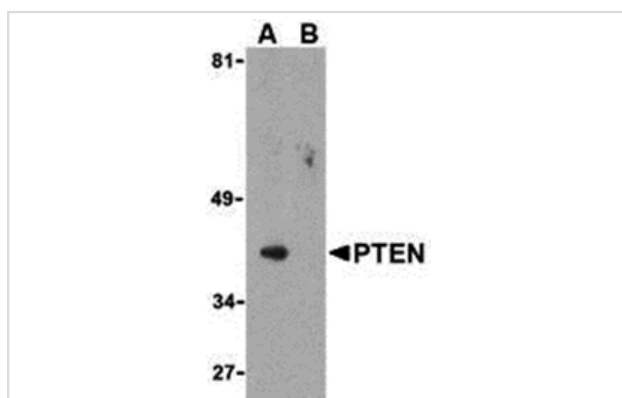
Description

Product Name	PTEN Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB
Species Reactivity	Hu Ms
Immunogen Type	Peptide
Immunogen Description	Raised against a 16 amino acid peptide from near the carboxy terminus of human PTEN.
Target Name	PTEN
Other Names	Phosphatase and tensin homolog, MMAC, TEP-1
Accession No.	P60484
Uniprot	P60484
GeneID	5728;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Images

Western blot analysis of PTEN in PC-3 cell lysate with PTEN antibody at 1 ug/mL in either the (A) absence or (B) presence of blocking peptide.

Background

PTEN (phosphatase and tensin homologue deleted on chromosome ten) is a dual-specificity phosphatase (with both protein and lipid phosphatase activity) first identified as a tumor suppressor gene. PTEN indirectly activates the AKT/PI3K pathway, an important signaling pathway for cell growth and proliferation by keeping levels of the second messenger PIP3 low, thereby preventing phosphoinositide-dependent kinase-1 (PDK-1) from phosphorylating and activating AKT. Expression of wild-type PTEN causes growth arrest in many cancer cell lines, but expression of a PTEN protein containing a mutation that blocks its lipid phosphatase activity failed to suppress growth of glioma cell lines suggesting that the tumor suppressive effect of PTEN is mediated solely by its lipid phosphatase activity. Other activities include the inhibition of insulin stimulated MAPK activation by blocking the insulin-receptor substrate (IRS)-1 phosphorylation and assembly of the IRS-1/Grb2/Sos complex.

Note: This product is for in vitro research use only