

Rabbit PTEN Polyclonal Antibody | anti-PTEN antibody

PTEN (Acetyl Lys402) Polyclonal Antibody

CATALOG # AAA293492	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Western Blot
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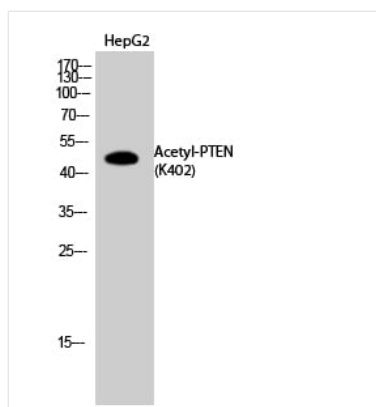
PRODUCT SYNONYMS

PTEN; Polyclonal Antibody; PTEN (Acetyl Lys402) Polyclonal Antibody; MMAC1; TEP1; Phosphatidylinositol 3; 4; 5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN; Mutated in multiple advanced cancers 1; Phosphatase and tensin homolog; anti-PTEN antibody

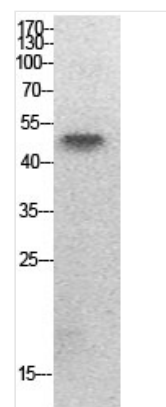
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Applicable Applications for anti-PTEN antibody	WB (Western Blot)
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES


WB (Western Blot)

Dilution: Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.


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ADDITIONAL INFORMATION

Related Product Information for anti-PTEN antibody	Tumor suppressor. Acts as a dual-specificity protein phosphatase, dephosphorylating tyrosine-, serine- and threonine- phosphorylated proteins. Also acts as a lipid phosphatase, removing the phosphate in the D3 position of the inositol ring from phosphatidylinositol 3, 4, 5-trisphosphate, phosphatidylinositol 3, 4-diphosphate, phosphatidylinositol 3- phosphate and inositol 1, 3, 4, 5-tetrakisphosphate with order of substrate preference in vitro PtdIns (3, 4, 5)P3 > PtdIns (3, 4)P2 > PtdIns3P > Ins (1, 3, 4, 5)P4 (PubMed:26504226). The lipid phosphatase activity is critical for its tumor suppressor function. Antagonizes the PI3K-AKT/PKB signaling pathway by dephosphorylating phosphoinositides and thereby modulating cell cycle progression and cell survival. The unphosphorylated form cooperates with AIP1 to suppress AKT1 activation. Dephosphorylates tyrosine-phosphorylated focal adhesion kinase and inhibits cell migration and integrin-mediated cell spreading and focal adhesion formation. Plays a role as a key modulator of the AKT-mTOR signaling pathway controlling the tempo of the process of newborn neurons integration during adult neurogenesis, including correct neuron positioning, dendritic development and synapse formation. May be a negative regulator of insulin signaling and glucose metabolism in adipose tissue. The nuclear monoubiquitinated form possesses greater apoptotic potential, whereas the cytoplasmic nonubiquitinated form induces less tumor suppressive ability. In motile cells, suppresses the formation of lateral pseudopods and thereby promotes cell polarization and directed movement.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	73765544
NCBI GeneID	5728
NCBI Accession #	NP_000305.3
NCBI GenBank Nucleotide #	NM_000314.4
UniProt Accession #	P60484; O00633; O02679; Q6ICT7; B2R904
Molecular Weight	47,166 Da
NCBI Official Full Name	phosphatidylinositol 3,4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN
NCBI Official Synonym Full Names	phosphatase and tensin homolog
NCBI Official Symbol	PTEN
NCBI Official Synonym Symbols	BZS; DEC; CWS1; GLM2; MHAM; TEP1; MMAC1; PTEN1; 10q23del
NCBI Protein Information	phosphatidylinositol 3,4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN; phosphatase and tensin-like protein; mutated in multiple advanced cancers 1; MMAC1 phosphatase and tensin homolog deleted on chromosome 10; phosphatidyli
UniProt Protein Name	Phosphatidylinositol 3,4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN
UniProt Gene Name	PTEN
UniProt Synonym Gene Names	MMAC1; TEP1
UniProt Entry Name	PTEN_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.