

Rabbit PTEN Polyclonal Antibody | anti-PTEN antibody

PTEN(Phospho-Ser370) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA303037	Rabbit	Human, Mouse, Rat	Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PTEN; Polyclonal Antibody; PTEN(Phospho-Ser370) Antibody; BZS; DEC; GLM2; MHAM; TEP1; anti-PTEN antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Specificity	The antibody detects endogenous level of PTEN only when phosphorylated at serine 370.
Purity/Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using
Form/Format	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1.0 mg/ml (varies by lot)
Sequence Length	403
Applicable Applications for anti-PTEN antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 370(D-V-S(p)-D-N) derived from Human PTEN.
Modification	Phospho-Ser370
Target Name	PTEN
Preparation and Storage	Store at -20 degree C

IMAGES



IF (Immunofluorescence)

Immunofluorescence staining of methanol-fixed MCF7 cells using PTEN (phospho-Ser370) antibody (, Red).



IHC (Immunohistochemistry)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using PTEN (phospho-Ser370) antibody (,).



WB (Western Blot)

Western blot analysis of extracts from HeLa cells using PTEN (phospho-Ser370) antibody ().

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. 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.
Product Categories/Family for anti-PTEN antibody	Phospho-specific Ab

NCBI AND UNIPROT INFORMATION

NCBI GI #	73765544
NCBI GeneID	5728
NCBI Accession #	NP_000305.3
NCBI GenBank Nucleotide #	NM_000314.6
UniProt Accession #	P60484; O00633; O02679; Q6ICT7; B2R904; F2YHV0
Molecular Weight	19,796 Da
NCBI Official Full Name	phosphatidylinositol 3,4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN isoform 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
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.