

Product datasheet for **AP02355PU-S**

PTEN pSer380/pThr382/383 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Western blot: 1/500 - 1/1000; Incubate membrane with diluted antibody in 5% nonfat milk, 1X TBS, 0,1% Tween-20 at 4°C with gentle shaking, overnight. Immunohistochemistry on paraffin sections: 1/50 - 1/100. Immunofluorescence: 1/100 - 1/200.
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic phosphopeptide derived from human PTEN around the phosphorylation site of serine 380 and threonine 382/383 (R-Y-SP-D-TP-TP-D-S).
Specificity:	PTEN (phospho-Ser380/Thr382/Thr383) antibody detects endogenous levels of PTEN only when phosphorylated at serine 380 and threonine 382/383.
Formulation:	Phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150 mM NaCl containing 0.02% Sodium Azide as preservative and 50% Glycerol as stabilizer State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Immunoaffinity chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	phosphatase and tensin homolog
Database Link:	Entrez Gene 5728 Human P60484



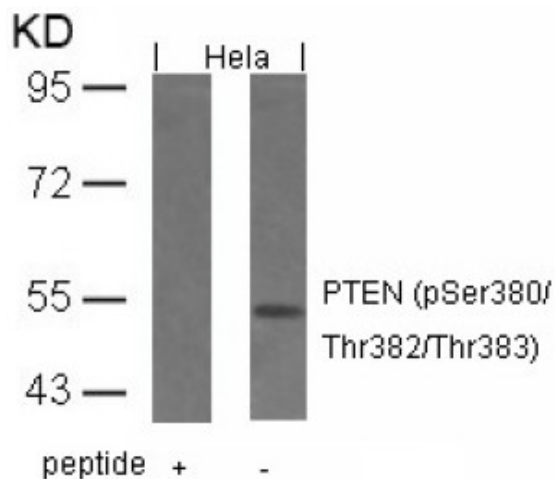
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Background:

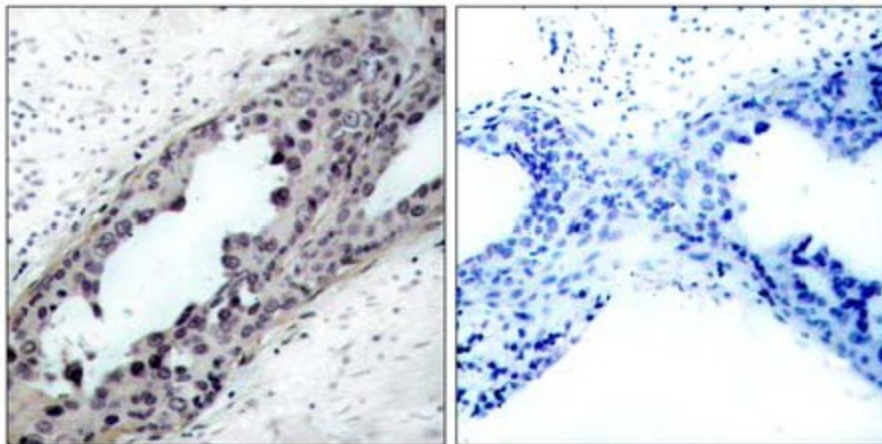
Tumor suppressor. Acts as a dual-specificity protein phosphatase, dephosphorylating tyrosine-, serine- and threonine-phosphorylated proteins. Also acts as a lipid phosphatase, removing the phosphate in the D3 position of the inositol ring from phosphatidylinositol 3,4,5-trisphosphate, phosphatidylinositol 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. May be a negative regulator of insulin signaling and glucose metabolism in adipose tissue.

Synonyms:

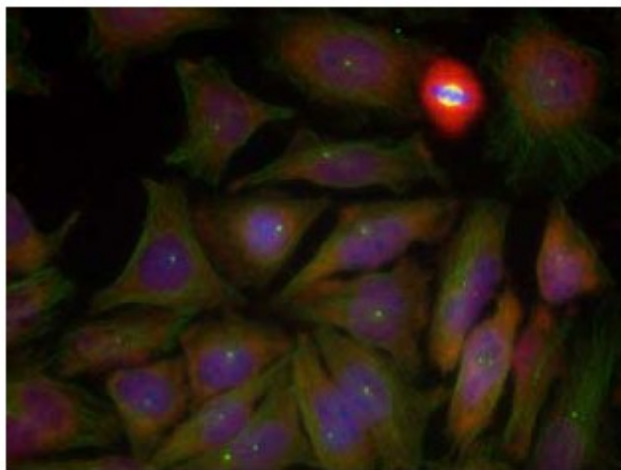
MMAC1, TEP1

Product images:

Western blot analysis of extract from HeLa cells using PTEN (pSer380/pThr382/pThr383) antibody and the same antibody preincubated with blocking peptide



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using PTEN (pSer380/pThr382/pThr383) antibody (left) or the same antibody preincubated with blocking peptide (right)



Immunofluorescence staining of methanol-fixed HeLa cells using PTEN (pSer380/pThr382/pThr383) antibody