

PTEN(Ab-370) Antibody

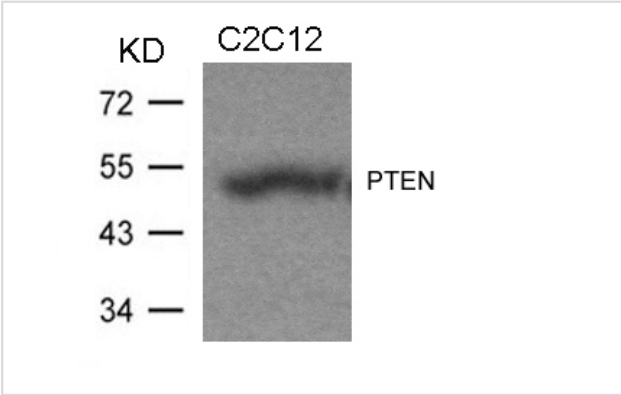
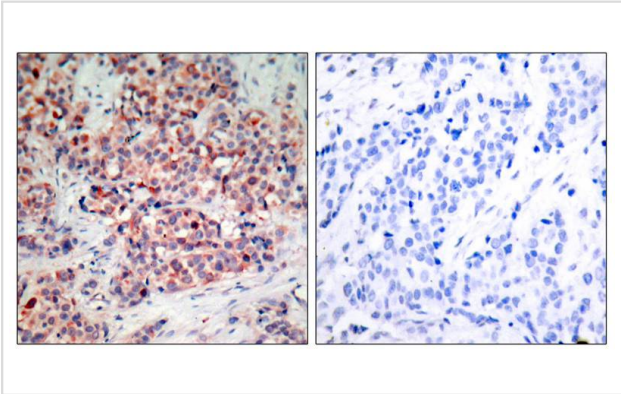
Catalog No: #21057



Package Size: #21057-1 50ul #21057-2 100ul #21057-4 25ul

Overview	
Product Name	PTEN(Ab-370) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Applications	WB IHC
Species Reactivity	Hu Ms Rt
Immunogen Type	Peptide-KLH
Target Name	PTEN
Alternative Names	MMAC1; Mutated in multiple advanced cancers 1; Protein-tyrosine phosphatase PTEN; TEP1;

Application Details	
Predicted MW: 54kd	
Western blotting: 1:500~1:1000	
Immunohistochemistry: 1:50~1:100	

Images	
	Western blot analysis of extracts from C2C12 cells using PTEN(Ab-370) Antibody #21057.
	Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using PTEN(Ab-370) Antibody #21057(left) or the same antibody preincubated with blocking peptide(right).

Descriptions

Immunogen	Peptide sequence around aa.368~372 (D-V-S-D-N) derived from Human PTEN.
Specificity	The antibody detects endogenous level of total PTEN protein.
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Formulation	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.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.
Accession NO.	Swiss-Prot: P60484NCBI Protein: NP_000305.3

Related Information

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.

Al-Khouri AM, et al. (2005). J Biol Chem. 280 (42):35195-35202.

Miller SJ, et al. (2002). FEBS Lett. 528 (1-3): 145-153.

Torres J, et al. (2001). J Biol Chem.276 (2): 993-998.

Vazquez F, et al. (2000). Mol Cell Biol.20 (14): 5010-5018.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.