PTEN(Phospho-Ser380/Thr382/Thr383) Antibody

Catalog No: #11056

Package Size: #11056-1 50ul #11056-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	PTEN(Phospho-Ser380/Thr382/Thr383) Antibody
Host Species	Rabbit
Clonality	Polyclonal
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 chromatogramphy using non-phosphopeptide.
Applications	WB IHC IF
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of PTEN only when phosphorylated at serine 380 and threonine 382/383.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of threonine 380/382/383 (R-Y-S(p)-D-T(p)-T(p)-D-S) derived from Human PTEN.
Target Name	PTEN
Modification	Phospho
Other Names	MMAC1; Mutated in multiple advanced cancers 1; Protein-tyrosine phosphatase PTEN; TEP1;
Accession No.	Swiss-Prot: P60484NCBI Protein: NP_000305.3
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), 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.

Application Details

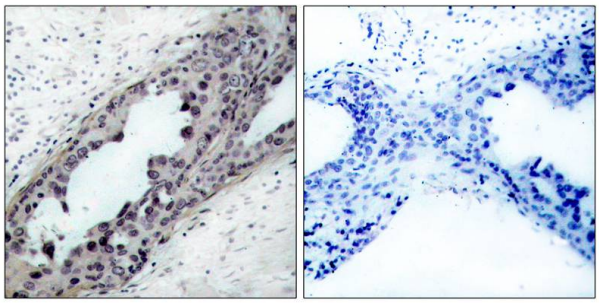
Predicted MW: 54kd

Western blotting: 1:500~1:1000

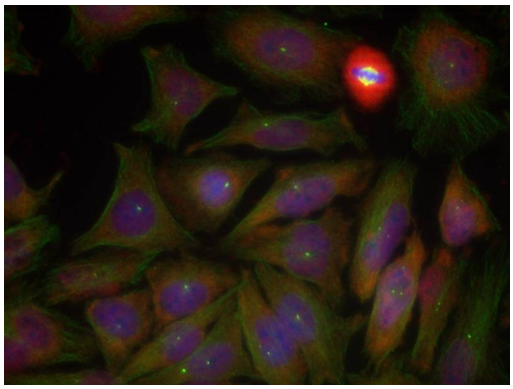
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

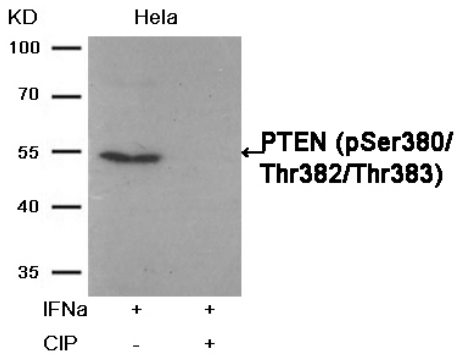
Images



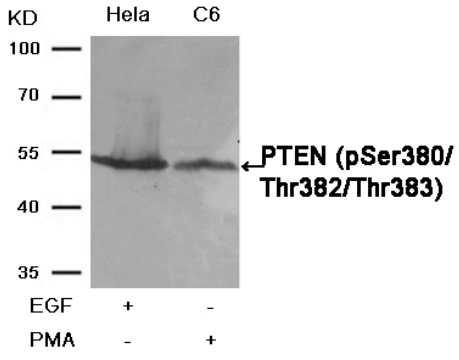
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using PTEN(Phospho-Ser380/Thr382/Thr383) Antibody #11056(left) or the same antibody preincubated with blocking peptide(right).



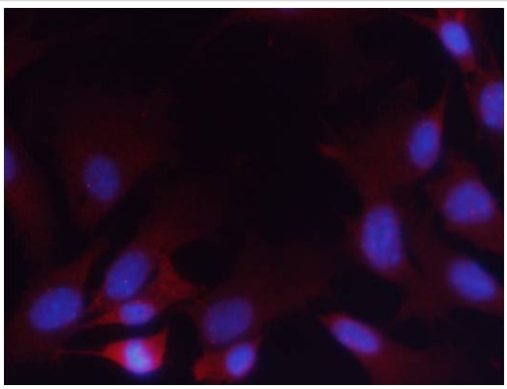
Immunofluorescence staining of methanol-fixed Hela cells using PTEN(Phospho-Ser380/Thr382/Thr383) Antibody #11056.



Western blot analysis of extracts from Hela cells, treated with IFNa or calf intestinal phosphatase (CIP), using PTEN (Phospho-Ser380/Thr382/Thr383) Antibody #11056.



Western blot analysis of extracts from Hela and C6 cells,treated with EGF or PMA, using PTEN(Phospho-Ser380/Thr382/Thr383) Antibody #11056.



Immunofluorescence staining of methanol-fixed MEFcells using PTEN (Phospho-Ser380/Thr382/Thr383)Antibody #11056.

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.

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

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

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