

PRODUCT DATA SHEET

Bioworld Technology,Inc.

PTEN (S385)polyclonal antibody

Catalog: AP0609 Host: Rabbit Reactivity: Human, Rat, Mouse

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 inositol ring from phosphatidylinositol of the 3,4,5-trisphosphate, phosphatidylinositol 3,4-diphosphate, phosphatidylinositol 3-phosphate 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 andcell survival. The unphosphorylated form cooperates with MAGI2 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.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.

Molecular Weight:

~ 52 kDa

Swiss-Prot:

P60484

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:1000~1:2000

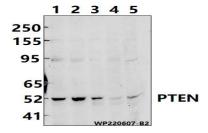
Storage&Stability:

Store at $4\,\mathrm{C}$ short term. Aliquot and store at $-20\,\mathrm{C}$ long term. Avoid freeze-thaw cycles.

Specificity:

PTEN (S385) polyclonal antibody detects endogenous levels of PTEN protein.

DATA:



Western blot (WB) analysis of PTEN (S385) polyclonal antibody at

1:1000 dilution

Lane1:A549 whole cell lysate(30ug)

Lane2:HepG2 whole cell lysate(30ug)

Lane3:HEK293T whole cell lysate(30ug)

Lane4:PC12 whole cell lysate(30ug)

Lane5:BV2 whole cell lysate(30ug)

Note:

For research use only, not for use in diagnostic procedure.

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