003216589045 (EU)
0203393 8531 (UK)
(408)780-0908 (US)
info@gentaur.com
www.caslab.com

PTEN Monoclonal Antibody

Cat #: G-AB-05706

Host: Mouse **Reactivity:** Human

Isotype: IgG **Clonality:** Monoclonal

Overview:
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

Gene ID:

Accession #:

Immunogen: Synthetic Peptide of PTEN

Conjugation: Unconjugated

Swissprot: P60484

Calculated Molecular Weight:

Observed Molecular Weight:

Concentration: 1 mg/mL

Buffer: PBS with 0.02% sodium azide, 0.5% BSA and 50% glycerol, pH7.4

Purification Method: Protein A purification

Application: IHC-p

Dilution: IHC 1:100-200

Storage: Store at -20°C. Avoid freeze / thaw cycles.