

产品名称: PTEN (16Q18) Rabbit Monoclonal Antibody  
产品货号: AMRe16636



## 产品概述 (Summary)

|                        |                                         |
|------------------------|-----------------------------------------|
| 产品名称 (Production Name) | PTEN (16Q18) Rabbit Monoclonal Antibody |
| 描述 (Description)       | Recombinant rabbit monoclonal antibody  |
| 宿主 (Host)              | Rabbit                                  |
| 应用 (Application)       | WB,IHC,FC,IP,IF-P                       |
| 种属反应性 (Reactivity)     | Human,Mouse,Rat                         |

## 产品性能 (Performance)

|                     |                                                                                                                                                                                              |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 偶联物 (Conjugation)   | Unconjugated                                                                                                                                                                                 |
| 修饰 (Modification)   | Unmodified                                                                                                                                                                                   |
| 同种型 (Isotype)       | IgG                                                                                                                                                                                          |
| 克隆 (Clonality)      | Monoclonal                                                                                                                                                                                   |
| 形式 (Form)           | Liquid                                                                                                                                                                                       |
| 存放说明 (Storage)      | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.                                                                                                     |
| 储存溶液 (Buffer)       | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |
| 纯化方式 (Purification) | Affinity purification                                                                                                                                                                        |

## 免疫原信息 (Immunogen)

|                        |                    |
|------------------------|--------------------|
| 基因名 (Gene Name)        | PTEN               |
| 别名 (Alternative Names) | PTEN; MMAC1; TEP1; |
| 基因 ID (Gene ID)        | 5728.0             |
| 蛋白 ID (SwissProt ID)   | P60484.            |

## 产品应用 (Application)

|                          |                                                                                |
|--------------------------|--------------------------------------------------------------------------------|
| 稀释比 (Dilution Ratio)     | WB 1:500-1:2000,IHC 1:200-1:2000,FC 1:200-1:500,IP 1:20-1:50,IF-P 1:200-1:2000 |
| 蛋白分子量 (Molecular Weight) | 47kDa                                                                          |

产品名称: PTEN (16Q18) Rabbit Monoclonal Antibody  
产品货号: AMRe16636



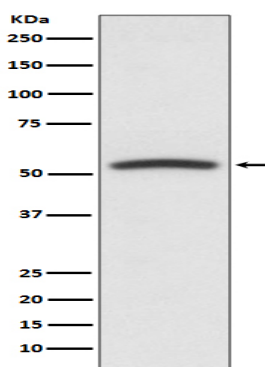
## 研究背景 (Background)

PTEN (phosphatase and tensin homologue deleted on chromosome ten), also referred to as MMAC (mutated in multiple advanced cancers) phosphatase, is a tumor suppressor implicated in a wide variety of human cancers. PTEN regulates p53 protein levels and activity (8) and is involved in G protein-coupled signaling during chemotaxis. 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  $\text{PtdIns}(3,4,5)\text{P}_3 > \text{PtdIns}(3,4)\text{P}_2 > \text{PtdIns}3\text{P} > \text{Ins}(1,3,4,5)\text{P}_4$  (PubMed:<a href="http://www.uniprot.org/citations/26504226" target="\_blank">26504226</a>, PubMed:<a href="http://www.uniprot.org/citations/16824732" target="\_blank">16824732</a>). 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 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.

## 研究领域 (Research Area)

Cell Biology

## 图片 (Image Data)



Western blot analysis of PTEN expression in Hela cell lysate.

## 注意事项 (Note)

For research use only .

产品名称: PTEN (16Q18) Rabbit Monoclonal Antibody  
产品货号: AMRe16636

---

