

PTEN (Clone 6H2.1)

Mouse Monoclonal Antibody

Specificity: Human. Others-not tested

Immunogen: C-terminal 100 amino acids of PTEN

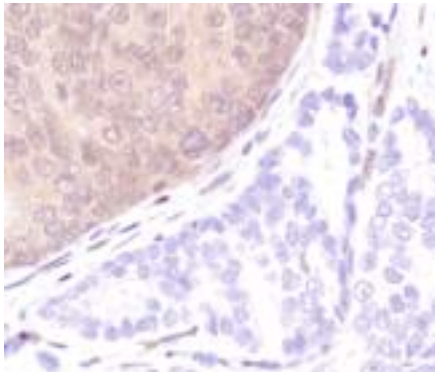
Ig Class: IgG2a/ κ

Storage: Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months

Staining procedures: Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* Pretreatment of deparaffinized tissue with heat-induced epitope retrieval is recommended. *Detection methods:* Polymer anti-mouse/rabbit Ig detection system. *Working dilution:* 1:50-100; *Positive Control:* prostate, prostate carcinoma. *Cellular Localization:* Cytoplasmic and nucleus. *Intended Use:* In vitro diagnosis (IVD).

Description: PTEN (phosphatase and tensin homolog deleted on chromosome ten) is a tumor suppressor gene that is mutated in a wide range of cancers. PTEN is located on chromosome sub-band 10q23.3 and encodes a 403 amino acid protein which acts as a dual-specific protein and phospholipid phosphatase. As a lipid phosphatase, PTEN regulates phosphatidylinositol-3'-kinase by dephosphorylating the D3 position of phosphatidylinositol (3,4,5)-triphosphate and phosphatidylinositol (3,4)-bisphosphate substrates, thereby antagonizing signal transduction downstream of phosphatidylinositol-(PI-3) kinase.⁷ Loss-of-function mutations in the PTEN gene lead to constitutive activation of multiple signaling pathways including the PI3K/Akt pathway which affects cell proliferation, apoptosis and migration. PTEN has also been shown to control p53 protein levels and transcriptional activity.

Supplied As: Purified antibody with 0.2% BSA and 15mM sodium azide.



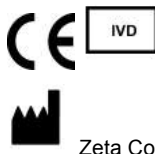
References:

1. Perren A, et al. *Am J Pathol.* 1999; 155:1253-1260
2. Pallares J, et al. *Mod Pathol.* 2005; 18:719-727

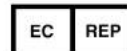
Formalin-fixed, paraffin-embedded human prostate carcinoma stained with anti-PTEN using peroxidase-conjugate and DAB chromogen. Note carcinoma (low right) is negative

Cat. #Z2077 (1.0 ml)

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