



DB055: PTEN (I16)

Background:

PTEN (also known as MMAC-1 or TEP-1) is one of the most frequently mutated tumor suppressors in human cancer. It is also essential for embryonic development. PTEN functions primarily as a lipid phosphatase to regulate crucial signal transduction pathways; a key target is phosphatidylinositol 3,4,5-trisphosphate. In addition, it displays weak tyrosine phosphatase activity, which may down modulate signaling pathways that involve focal adhesion kinase (FAK) or Shc (1). PTEN negatively regulates Akt activation by preventing its phosphorylation. PTEN therefore inhibits the PI 3-kinase/Akt signaling pathway, which is important for cell growth and survival (3). Mutations of PTEN occur in 60-80% of prostate cancers (6). PTEN defects have been implicated in Cowden disease, endometrial, breast, renal, lung, and ovarian cancers as well as in glioblastomas (2,4,5,7,8).

Origin:

PTEN (I16) is provided as an affinity purified rabbit polyclonal antibody, raised against a peptide mapping to an internal domain of human PTEN.

Product Details:

Each vial contains 200 µg/ml of affinity purified rabbit IgG PTEN (I16) *DB055*, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

Competition Studies:

A blocking peptide is also available, *DB055P*, for use in competition studies. Each vial contains 100 µg of peptide in 0.5 ml PBS with 0.1% sodium azide and 100 µg BSA.

Specificity:

PTEN (I16) *DB055* reacts with PTEN of mouse, rat and human origin by western blotting. Western blotting starting dilution: 1:200.

Immunoprecipitation: not yet tested

Immunohistochemistry: not yet tested

Storage:

Store this product at 4° C, do not freeze. The product is stable for one year from the date of shipment.

References:

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