

Human Phosphatase and tension homolog deleted on chromosome ten (PTEN/MMAC1) ELISA Kit



Catalog No: #EK8038

Orders: order@signalwayantibody.com

Package Size: #EK8038-1 48T #EK8038-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Human Phosphatase and tension homolog deleted on chromosome ten (PTEN/MMAC1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	10q23del; BZS; MGC11227; MHAM; MMAC1; PTEN1; TEP1; MMAC1 phosphatase and tensin homolog deleted on chromosome 10 mutated in multiple advanced cancers 1
Accession No.	P60484
Uniprot	P60484
GeneID	5728;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.134 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:Sandwich Test principle:This assay employs a two-site sandwich ELISA to quantitate PTEN in samples. An antibody specific for PTEN has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any PTEN present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PTEN is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of PTEN bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:PTEN acts as a tumor suppressor gene through the action of its phosphatase protein product. This phosphatase is involved in the regulation of the cell cycle, preventing cells from growing and dividing too rapidly.This gene was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. The protein encoded by this gene is a phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase. It contains a tensin like domain as well as a catalytic domain similar to that of the dual specificity protein tyrosine phosphatases. this protein preferentially dephosphorylates phosphoinositide substrates. It negatively regulates intracellular levels of phosphatidylinositol-3,4,5-trisphosphate in cells and functions as a tumor suppressor by negatively regulating Akt/PKB signaling pathway.

Note: This product is for in vitro research use only