



# Human PTEN blocking peptide (CDBP2428)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	PTEN ( internal ) peptide ( human )
<b>Antigen Description</b>	This gene was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. The protein encoded 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. Unlike most of the 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. [provided by RefSeq, Jul 2008]
<b>Species</b>	Human
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	BL
<b>Concentration</b>	0.2 mg/ml
<b>Size</b>	500 µl
<b>Buffer</b>	Preservative: 0.1% Sodium Azide; Constituents: PBS, BSA
<b>Preservative</b>	0.1% Sodium Azide
<b>Storage</b>	Store this product at 4 °C, do not freeze. The product is stable for one year from the date of shipment.

## GENE INFORMATION

**Gene Name** [PTEN phosphatase and tensin homolog \[ Homo sapiens \]](#)

<b>Official Symbol</b>	PTEN
<b>Synonyms</b>	PTEN; phosphatase and tensin homolog; BZS, MHAM; phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN; MMAC1; mutated in multiple advanced cancers 1; PTEN1; TEP1; phosphatase and tensin-like protein; MMAC1 phosphatase and tensin homolog deleted on chromosome 10; BZS; DEC; GLM2; MHAM; 10q23del; MGC11227;
<b>Entrez Gene ID</b>	<a href="#">5728</a>
<b>mRNA Refseq</b>	<a href="#">NM_000314</a>
<b>Protein Refseq</b>	<a href="#">NP_000305</a>
<b>UniProt ID</b>	P60484
<b>Chromosome Location</b>	10q23
<b>Pathway</b>	3-phosphoinositide degradation, organism-specific biosystem; 3-phosphoinositide degradation, conserved biosystem; Adaptive Immune System, organism-specific biosystem; Androgen Receptor Signaling Pathway, organism-specific biosystem; BCR signaling pathway, organism-specific biosystem; Class I PI3K signaling events, organism-specific biosystem; D-myo-inositol (1,3,4)-trisphosphate biosynthesis, organism-specific biosystem;
<b>Function</b>	PDZ domain binding; anaphase-promoting complex binding; enzyme binding; hydrolase activity; inositol-1,3,4,5-tetrakisphosphate 3-phosphatase activity; lipid binding; magnesium ion binding; phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase activity; p