

## Rabbit Anti-PTEN Polyclonal Antibody

CPB-627RH Rabbit(PTEN)

Lot. No. (See product label)

### PRODUCT INFORMATION

<b>Product Overview</b>	Rabbit Anti-PTEN Polyclonal Antibody
<b>Antigen Description</b>	Tumor suppressor. Acts as a dual-specificity protein phosphatase, dephosphorylating tyrosine-, serine- and threonine-phosphorylated proteins. Antagonizes the P13K-AKT/PKB signaling pathway by dephosphorylating phosphoinositides and thereby modulating cell cycle progression and cell survival.
<b>specificity</b>	The antibody detects endogenous level of PTEN only when phosphorylated at serine 380 and threonine 382/383.
<b>Target</b>	PTEN
<b>Immunogen</b>	Peptide sequence around phosphorylation site of threonine 380/382/383 (R-Y-S(p)-D-T(p)-T(p)-D-S) derived from Human PTEN.
<b>Host</b>	Rabbit
<b>Species</b>	Human
<b>Cross Reactivity</b>	Human; Mouse; Rat
<b>conjugation</b>	N/A
<b>Applications</b>	IFA, WB, IHC

### PACKAGING

<b>Format</b>	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Storage</b>	Store at -20°C /1 year

### ANTIGEN GENE INFORMATION

<b>Gene Name</b>	<a href="#">PTEN phosphatase and tensin homolog [ Homo sapiens ]</a>
<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>GeneID</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

**Pathway**

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 -trisphosphate biosynthesis, organism-specific biosystem;

**Function**

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; phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase activity; phosphatidylinositol-3,4-bisphosphate 3-phosphatase activity; phosphatidylinositol-3-phosphatase activity; phosphoprotein phosphatase activity; protein binding; protein serine/threonine phosphatase activity; protein tyrosine phosphatase activity; protein tyrosine/serine/threonine phosphatase activity;