

Phospho-PTEN-S380 pAb

Catalog No.	AP0436	Category	Phosphorylated Antibodies
Applications	IHC, IF	Observed MW	
Cross-reactivity	Human, Mouse, Rat	Calculated MW	19kDa/47kDa/64kDa

Immunogen Information

Immunogen	A phospho specific peptide corresponding to residues surrounding S380 of human PTEN
Gene ID	5728
Swiss prot	P60484
Synonyms	PTEN; 10q23del; BZS; CWS1; DEC; GLM2; MHAM; MMAC1; PTEN1; TEP1; PTENbeta; phosphatase and tensin homolog

Product information

Source	Rabbit
Isotype	IgG
Purification method	Affinity purification
Storage	Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

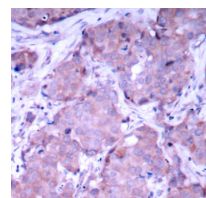
Background

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. 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. The use of a non-canonical (CUG) upstream initiation site produces a longer isoform that initiates translation with a leucine, and is thought to be preferentially associated with the mitochondrial inner membrane. This longer isoform may help regulate energy metabolism in the mitochondria. A pseudogene of this gene is found on chromosome 9. Alternative splicing and the use of multiple translation start codons results in multiple transcript variants encoding different isoforms.

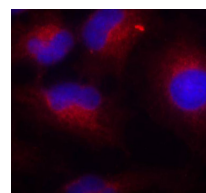
Recommended Dilutions

IHC 1:50 - 1:200

IF 1:100 - 1:200



Immunohistochemistry - Phospho-PTEN-S380 pAb (AP0436)



Immunofluorescence - Phospho-PTEN-S380 pAb (AP0436)