

PTEN Polyclonal Antibody

Cat No: HR1AP4387

For research use only

Overview

Product Name	PTEN Polyclonal Antibody
Source	Rabbit
Applications	WB,ELISA
Species Reactivity	Human,Mouse,Rat
Recommended Dilutions	
Immunogen	
Species	Rabbit
Storage	-20°C/1 year
Isotype	
Clonality	
Concentration	1 mg/ml
Observed band	47kDa
GeneID?Human?	PTEN
Human Swiss-Prot No.	
Cellular localization	
Alternative Names	PTEN; MMAC1; TEP1; Phosphatidylinositol 3; 4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN; Mutated in multiple advanced cancers 1; Phosphatase and tensin homolog
Background	phosphatase and tensin homolog(PTEN) Homo sapiens 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 ener