Product name:	PTEN Rabbit Monoclonal Antibody
Cat number:	MABN21527
Conjugate:	Unconjugated
Size:	100µL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG,Kappa
Immunogen:	A synthetic peptide corresponding to target protein
Reactivity:	Human,Mouse,Rat,
Applications:	WB 1:1000-1:5000,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000,IP 1:50-1:200
Molecular Weight:	CalcuLated MW:47kD;Observed MW:56kD
Purification:	Protein A
Form:	Liquid
Buffer:	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
Background:	Cell localization:Cytoplasm, Nuclear.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