Anti-Phospho-PTEN (Ser380) Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P108518

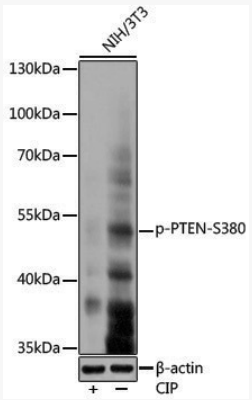
Product Information

Application	WB, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:500~1:1000
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	A synthetic phosphorylated peptide around S380 of human PTEN (NP_000305.3).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Phospho-PTEN (Ser380) Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	BZS; DEC; CWS1; GLM2; MHAM; TEP1; MMAC1; PTEN1; 10q23del; PTENbeta; Phospho-PTEN-S380.
Calculated MW	Calculated MW: 47 kDa; Observed MW: 54 kDa
Uniprot ID	P60484
Gene ID	5728
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.

Validation Images



Western blot analysis of lysates from NIH/3T3 cells, using Phospho-PTEN-S380 Rabbit pAb (P108518) at 1:1,000 dilution. NIH/3T3 cells were treated by CIP(20uL/400ul) at 37°C for 1 hour.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 1s.