

PTEN (AB2350) mouse mAb

W0043

Key Features

Host Species

- Mouse

Reactivity

- Human;

Applications

- IHC; WB; IF; ELISA

MW

- 47 kDa (calculated)
- 47 kDa (observed)

Isotype

- IgG

Recommended Dilution Ratios

Application

IHC; WB; IF; ELISA

Dilution

IHC, 1:200-1:1000 | WB, 1:500-1:2000 | IF, 1:100-1:500 | ELISA, Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Storage

Storage Conditions

Store at -20°C. Avoid freeze / thaw cycles.

Storage buffer

The antibody is provided in liquid form in phosphate - buffered saline with 50% glycerol, 0.05% BSA, and 0.05% Proclin 300.

Basic Information

Clonality Monoclonal

Clone Number AB2350

Immunogen A synthetic peptide corresponding to the amino acid region 300 - 403 of the human PTEN protein.

Specificity This antibody detects endogenous levels of PTEN protein.

Purification Affinity purification Protein A

Concentration Product concentration may vary by batch. Please refer to the product COA for details.

Target Information

Gene name PTEN
MMAC1

Protein Name PTEN

Database Link	Organism	Swiss Prot.	Gene ID
	Human	P60484	5728

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

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longer isoform may help regulate ener