

# PTEN antibody

#### **Product Information**

Catalog No.: FNab06912

Size: 100μg Form: liquid

Purification: Protein A+G purification

Purity: ≥95% as determined by SDS-PAGE

Host: Mouse

Clonality: monoclonal

Clone ID: 9E6
IsoType: IgG1

Storage: PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12

months(Avoid repeated freeze / thaw cycles.)

### **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.

#### **Immunogen information**

Immunogen: phosphatase and tensin homolog

Synonyms: Phosphatidylinositol 3,4,5-trisphosphate 3-phosphatase and dual-

specificity protein phosphatase PTEN|Inositol polyphosphate 3-phosphatase|Mutated in multiple advanced cancers 1|Phosphatase and

tensin homolog|PTEN|MMAC1|TEP1

Observed MW: 47 kDa Uniprot ID: P60484



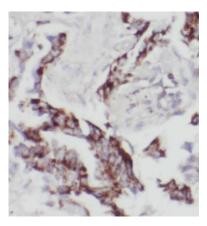
## Application

Reactivity: Human, Mouse

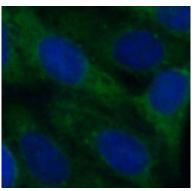
Tested Application: ELISA, IHC, WB, IF

Recommended dilution: WB: 1:1000-1:4000; IHC: 1:200-1:1000; IF: 1:20-1:200

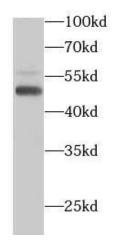
Image:



Immunohistochemistry of paraffin-embedded human lung cancer tissue slide using FNab06912(PTEN Antibody) at dilution of 1:500



Immunofluorescent analysis of HepG2 cells using FNab06912 (PTEN antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Goat Anti-Mouse IgG(H+L)



DU 145 cells were subjected to SDS PAGE followed by western blot with FNab06912(PTEN Antibody) at dilution of 1:2000