# Recombinant PTEN Monoclonal Antibody

**catalog number:** **AN301026L**

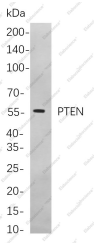
**Note:** *Centrifuge before opening to ensure complete recovery of vial contents.*

## Description

| | |
|---|---|
| **Reactivity** | Human;Mouse;Rat |
| **Immunogen** | Recombinant Human PTEN protein |
| **Host** | Rabbit |
| **Isotype** | Rabbit IgG |
| **Clone** | C110650 |
| **Purification** | Protein A |
| **Buffer** | PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant. |

| Applications | Recommended Dilution |
|---|---|
| **IHC** | 1:200-1:1000 |
| **WB** | 1:1000-1:5000 |
| **IF** | 1:200-1:1000 |
| **ELISA** | 1:5000-1:20000 |

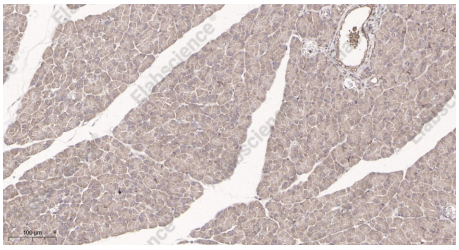
## Data



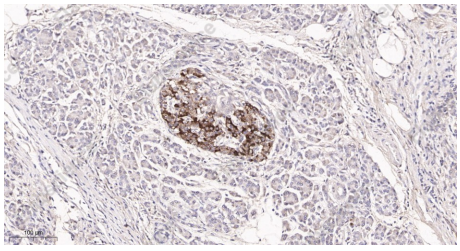

Western Blot with Recombinant PTEN Monoclonal Antibody at dilution of 1:1000 dilution. Lane A: MCF7 cells.

**Observed-MW:56 kDa**

**Calculated-MW:47 kDa**



Immunohistochemistry of paraffin-embedded rat panreas tissue using Recombinant PTEN Monoclonal Antibody at dilution of 1:200.



Immunohistochemistry of paraffin-embedded human panreas tissue using Recombinant PTEN Monoclonal Antibody at dilution of 1:200.

## Preparation & Storage

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|---|---|
| **Storage** | Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles. |
| **Shipping** | Ice bag |

## 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.