

# [KO Validated] PTEN Rabbit Polyclonal Antibody



CAB11193

## Product Information

### Size:

20uL, 50uL, 100uL, 200uL

### Observed MW:

54kDa

### Calculated MW:

19kDa/47kDa/64kDa

### Applications:

WB IHC IF

### Reactivity:

Human, Mouse, Rat

## Antibody Information

### Recommended dilutions:

WB 1:500 - 1:2000 IHC 1:50  
- 1:200 IF 1:50 - 1:200

### Source:

Rabbit

### Isotype:

IgG

### Purification:

Affinity purification

## Protein 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

### Gene ID:

5728

### Uniprot

P60484

### Synonyms:

10q23del; BZS; CWS1; DEC; GLM2; MHAM; MMAC1; PTEN1; TEP1;  
PTEN; PTENbeta

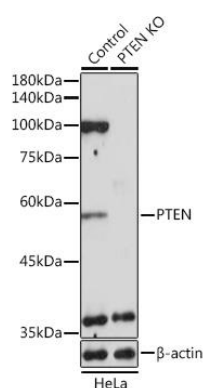
### Immunogen:

Recombinant fusion protein containing a sequence corresponding to amino acids 209-403 of human PTEN (NP\_000305.3).

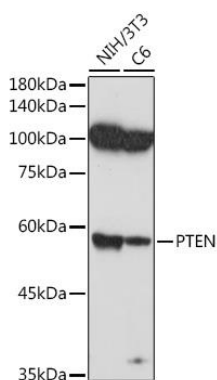
### Storage:

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

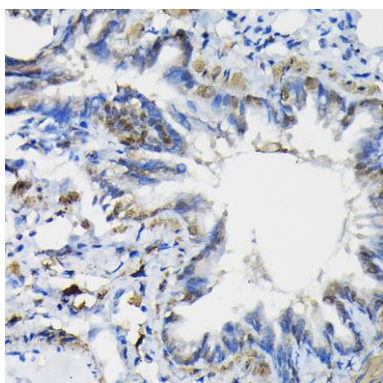
## Product Images



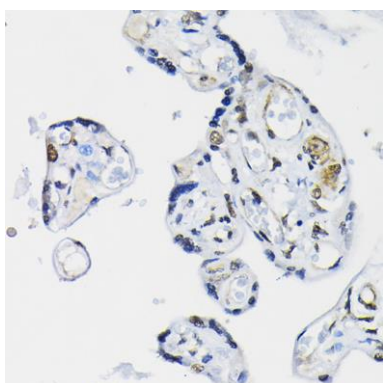
Western blot analysis of extracts from normal (control) and PTEN knockout (KO) HeLa cells, using PTEN antibody (CAB11193) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 180s.



Western blot analysis of extracts of various cell lines, using PTEN antibody (CAB11193) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 90s.



Immunohistochemistry of paraffin-embedded rat lung using PTEN Rabbit pAb (CAB11193) at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human placenta using PTEN Rabbit pAb (CAB11193) at dilution of 1:100 (40x lens).