

# IHC*easy* PTEN Ready-To-Use IHC Kit

Catalog Number: **KHC0280**

## General Information

**Sample type:**  
FFPE tissue

**Cited sample type:**

**Reactivity:**  
Human, Mouse, Rat

**Cited Reactivity:**

**Assay type:**  
Immunohistochemistry

**Primary antibody type:**  
Rabbit Polyclonal

**Secondary antibody type:**  
Polymer-HRP-Goat anti-Rabbit

## Kit Component

Component	Size	Concentration
Antigen Retrieval Buffer	100 mL	50×
Washing Buffer	100 mL ×2	20×
Blocking Buffer	5 mL	RTU
Primary Antibody	5 mL	RTU
Secondary Antibody	5 mL	RTU
Chromogen Component A	0.2 mL	RTU
Chromogen Component B	4 mL	RTU
Signal Enhancer	5 mL	RTU
Counter Staining Reagent	5 mL	RTU
Mounting Media	5 mL	RTU
Control Slide	1 slide (Optional)	FFPE
Datasheet	1 Copy	
Manual	1 Copy	

## Storage Instructions

All the reagents are stored at 2-8°C. The kit is stable for 6 months from the date of receipt.

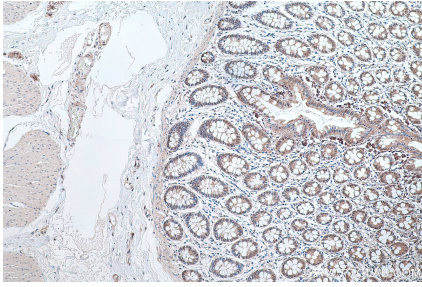
## Background

PTEN(Phosphatase and tensin homolog) is also named as MMAC1, TEP1 and it modulates cell cycle progression and cell survival (blockage) through down-regulating the positive cell cycle-regulator (cycle D1) by its phosphatase activity and up-regulating the negative cell cycle regulator p21 (by its lipid phosphatase activity). PTEN is an important tumor suppressor whose inactivation frequency in cancers is ranked second after p53 tumor suppressor inactivation. PTEN is a 403-residue protein structured in an amino (N)-terminal phosphatase domain and a carboxy (C)-terminal C2 domain that binds phospholipid membranes. There are some report showing that SUMOylation appears to be a positive regulator in controlling PTEN membrane association, whereas phosphorylation is a negative regulator that may neutralize SUMOylation through intramolecular electrostatic interactions.

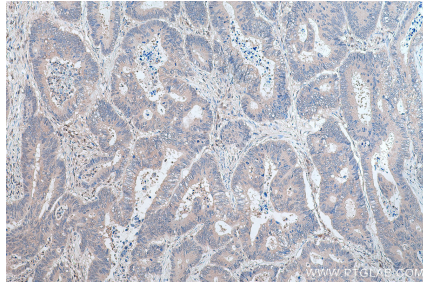
## Synonyms

10q23del, Bannayan Zonana syndrome, BC005821, BZS, ITGA 2, MGC11227, MHAM, MMAC1, Multiple hamartoma (Cowden syndrome), phosphatase and tensin homolog, PTEN, PTEN1, TEP1

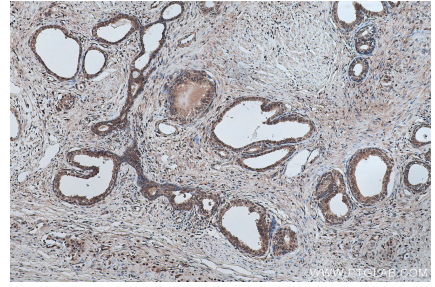
## Selected Validation Data



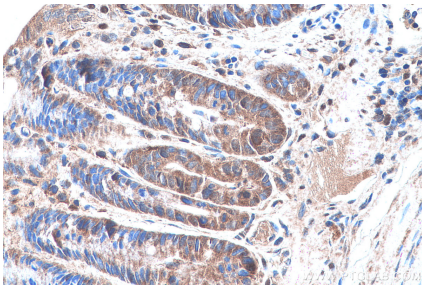
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using KHC0280 (PTEN IHC Kit).



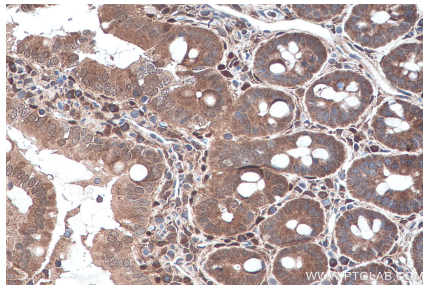
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using KHC0280 (PTEN IHC Kit).



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using KHC0280 (PTEN IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using KHC0280 (PTEN IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat colon tissue slide using KHC0280 (PTEN IHC Kit).