

## Anti-PTEN Antibody Picoband®

Catalog Number: A00006-1

### About PTEN

PTEN is also known as BZS, DEC, CWS1, GLM2, MHAM, TEP1, PTEN1. It is mapped to 10q23.3. 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. The PTEN structure reveals a phosphatase domain that is similar to protein phosphatases but also has an enlarged active site important for the accommodation of the phosphoinositide substrate.

### Overview

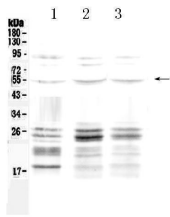
Product Name	Anti-PTEN Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PTEN Antibody Picoband® catalog # A00006-1. Tested in WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , and 0.05 mg Na <sub>3</sub> N. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P60484

### Technical Details

Immunogen	E. coli-derived human PTEN recombinant protein (Position: T2-T202). Human PTEN shares 100% amino acid (aa) sequence identity with mouse PTEN.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western

	blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

## Anti-PTEN Antibody Picoband® (A00006-1) Images



Western blot analysis of PTEN using anti-PTEN antibody (A00006-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysate, Lane 2: mouse liver tissue lysate, Lane 3: human A549 whole cell lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PTEN antigen affinity purified polyclonal antibody (Catalog # A00006-1) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PTEN at approximately 54KD. The expected band size for PTEN is at 47KD.

## 14 Publications Citing This Product

1. PubMed ID: 10.3892/ijo.2016.3401, miR-223 reverses the resistance of EGFR-TKIs through IGF1R/PI3K/Akt signaling pathway
2. PubMed ID: 31614022, Sun M, Hu L, S, Huang T, Zhang M, Yang M, Zhen W, Yang D, Lu W, Guan M, Peng S. Circulating MicroRNA-19b Identified From Osteoporotic Vertebral Compression Fracture Patients Increases Bone Formation. J Bone Miner Res. 2020 Feb; 35(2):306-316. doi:10.1002/jbmr.3892.
3. PubMed ID: 26936292, miR-223 reverses the resistance of EGFR-TKIs through IGF1R/PI3K/Akt signaling pathway

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Anti-PTEN Antibody

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