

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.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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 µg/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used Western blot, 0.1-0.5μg/ml, Human, Mouse, Rat</p> <p>For protocols, please visit https://www.bosterbio.com/protocol-and-troubleshooting/</p>

Anti-PTEN Antibody Picoband™ (A00006-1) Images

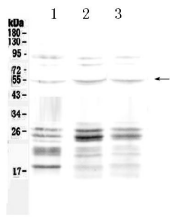


Figure 1. Western blot analysis of PTEN using anti-PTEN antibody (A00006-1).

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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