

Anti-TGF beta Receptor I/TGFBR1 Antibody Picoband®

Catalog Number: PB10101

About TGFBR1

Transforming growth factor, beta receptor I is a TGF beta receptor. TGFBR1 is its human gene. The protein encoded by this gene forms a heteromeric complex with type II TGF-beta receptors when bound to TGF-beta, transducing the TGF-beta signal from the cell surface to the cytoplasm. Mutations in this gene have been associated with Loeys-Dietz aortic aneurysm syndrome (LDAS). TGFBR1 regulates cell cycle progression by a unique signaling mechanism that involves its binding to TGFBR2 and activation of TGFBR1. Both are transmembrane serine/threonine receptor kinases. The TGFBR1 receptor may be inactivated in many of the cases of human tumor cells refractory to TGF-beta-mediated cell cycle arrest.

Overview

Product Name	Anti-TGF beta Receptor I/TGFBR1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-TGF beta Receptor I/TGFBR1 Antibody Picoband® catalog # PB10101. 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 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
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	P36897

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human TGFBR1, identical to the related mouse and rat sequences.
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	<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:</p> <p>Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat</p>

Anti-TGF beta Receptor I/TGFBR1 Antibody Picoband® (PB10101) Images

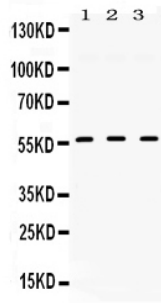


Figure 1. Western blot analysis of TGFBR1 using anti-TGFBR1 antibody (PB10101).

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 30 ug of sample under reducing conditions.

Lane 1: rat cardiac muscle tissue lysates,

Lane 2: mouse liver tissue lysates,

Lane 3: HELA whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-TGFBR1 antigen affinity purified polyclonal antibody (Catalog # PB10101) 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 1:5000 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 TGFBR1 at approximately 56 kDa. The expected band size for TGFBR1 is at 56 kDa.

3 Publications Citing This Product

1. PubMed ID: 11780431, Effects of AT1 receptor antagonist, losartan, on rat hepatic fibrosis induced by CCI4
2. PubMed ID: 26279755, Different localization and expression of protein kinase C-beta in kidney cortex of diabetic nephropathy mice and its role in telmisartan treatment
3. PubMed ID: 21464546, Effects of interferon-alpha on expression of hepatic stellate cell and transforming growth factor- β 1 and β -smooth muscle actin in rats with hepatic fibrosis

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