

## Anti-TGF beta Receptor I/TGFBR1 Antibody Picoband®

Catalog Number: PB9828

### 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. Vellucci and Reiss (1997) reported that the TGFBR1 gene is approximately 31 kb long and contains 9 exons. The organization of the segment of the gene that encodes the C-terminal portion of the serine/threonine kinase domain appears to be highly conserved among members of the gene family.

### Overview

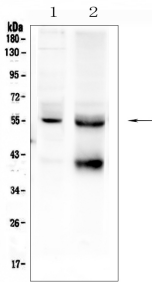
Product Name	Anti-TGF beta Receptor I/TGFBR1 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-TGF beta Receptor I/TGFBR1 Antibody Picoband® catalog # PB9828. Tested in WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees 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 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
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	Western blot, 0.1-0.5ug/ml, Human

## Anti-TGF beta Receptor I/TGFBR1 Antibody Picoband® (PB9828) Images



Western blot analysis of TGFBR1/Tgf Beta Receptor I using anti-TGFBR1/Tgf Beta Receptor I antibody (PB9828). 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: human Hela whole cell lysates, Lane 2: human SW579 whole cell lysates. 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-TGFBR1/Tgf Beta Receptor I antigen affinity purified polyclonal antibody (Catalog # PB9828) 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 TGFBR1/Tgf Beta Receptor I at approximately 50-56KD. The expected band size for TGFBR1/Tgf Beta Receptor I is at 56KD.

### 3 Publications Citing This Product

1. PubMed ID: 11780431, Effects of AT1 receptor antagonist, losartan, on rat hepatic fibrosis induced by CCl4
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- $\beta$ 1 and  $\beta$ -smooth muscle actin in rats with hepatic fibrosis

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