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antibody and ELISA experts

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Anti-TNXB Antibody Picoband®

Catalog Number: PB9833

About TNXB

tenascin X (TN-X), also known as hexabrachion-like protein, is a glycoprotein that is expressed in connective tissues including skin, joints and muscles. In humans, tenascin X is encoded by the TNXB gene. This gene encodes a member of the tenascin family of extracellular matrix glycoproteins. The tenascins have anti-adhesive effects, as opposed to fibronectin which is adhesive. This protein is thought to function in matrix maturation during wound healing, and its deficiency has been associated with the connective tissue disorder Ehlers-Danlos syndrome. This gene localizes to the major histocompatibility complex (MHC) class III region on chromosome 6. It is one of four genes in this cluster which have been duplicated. The duplicated copy of this gene is incomplete and is a pseudogene which is transcribed but does not encode a protein. The structure of this gene is unusual in that it overlaps the CREBL1 and CYP21A2 genes at its 5' and 3' ends, respectively. Multiple transcript variants encoding different isoforms have been found for this gene.

Overview

Product Name	Anti-TNXB Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-TNXB Antibody Picoband® catalog # PB9833. Tested in Flow Cytometry, IF, IHC, ICC, 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	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na2HPO4, and 0.05 mg NaN3. *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	P22105

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human TNXB.

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Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
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 Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human Immunocytochemistry/Immunofluorescence, 2ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10^6 cells, Human

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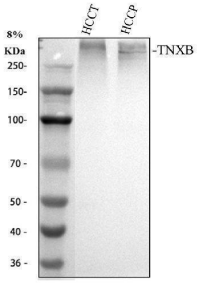
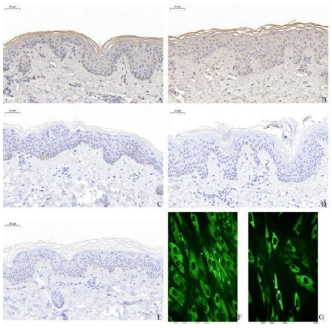
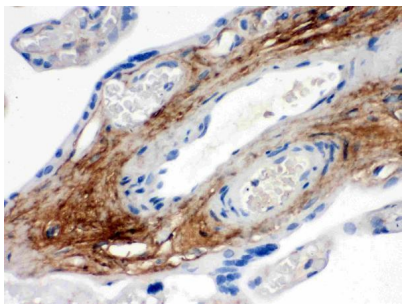
Anti-TNXB Antibody Picoband® (PB9833) Images



Western blot analysis of TNXB using anti-TNXB antibody (PB9833). Electrophoresis was performed on a 8% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human hepatocellular carcinoma tumor tissue (HCCT) lysates, Lane 2: human hepatocellular carcinoma paracancerous tissue (HCCP) 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-TNXB antigen affinity purified polyclonal antibody (PB9833) 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 (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for TNXB at approximately 458 kDa. The expected band size for TNXB is at 458 kDa.



IHC results in patients 1, 2, 7 and Immunofluorescence staining Patient 4. Immunohistochemistry results in patient 7 (B) showed collagen expression was widely reduced compared with controls (A) in basement membrane. The expression of type III collagen from patients 1(D) and 2(E) significantly lower compared with controls (C). There are large quantities of type I collagen, uniformly distributed in normal fibroblasts (F). In contrast, COL1A1 expression was reduced and significantly unevenly distributed in the fibroblasts of Patient 4(G). ((A) and (B), TNXB antibody IHC stain ×40; (C), (D) and (E), COL3A1 antibody IHC stain ×40; (F) and (G), immunofluorescence stain ×20) Index in PubMed under a CC BY license. PMID: 40598578



IHC analysis of TNXB using anti-TNXB antibody (PB9833). TNXB was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-TNXB Antibody (PB9833) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

IF analysis of TNXB using anti-TNXB antibody (PB9833). TNXB was detected in immunocytochemical section of MCF7 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The

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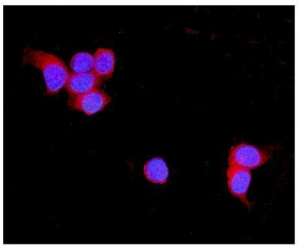
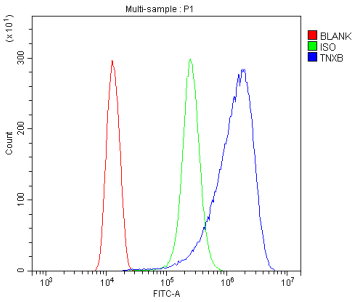


cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-TNXB Antibody (PB9833) overnight at 4°C. DyLight®594 Conjugated Goat Anti-Rabbit IgG (BA1142) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of Hela cells using anti-TNXB antibody (PB9833).Overlay histogram showing Hela cells stained with PB9833 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-TNXB Antibody (PB9833,1ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Anti-TNXB Antibody

For Research Use Only. Not for use in diagnostic procedures.