

## Anti-Versican/VCAN Antibody Picoband®

Catalog Number: PB9453

### About VCAN

Versican (VCAN), also known as CSPG2, is a large extracellular matrix proteoglycan that is present in a variety of human tissues. Versican is a large chondroitin sulfate proteoglycan with an apparent molecular mass of more than 1000kDa. The Versican gene is mapped on 5q14.2-q14.3. The human versican gene contains 15 exons spanning more than 90 kb. The distribution of versican by using affinity-purified polyclonal antibodies that recognize the core protein of the prominent versican splice variants V0 and V1. Versican staining was noted in the central and peripheral nervous system, in the basal layer of the epidermis, and on the luminal surface of some glandular epithelia. Biochemical purification of LLC-conditioned medium led to identification of the extracellular matrix proteoglycan versican, which is upregulated in many human tumors including lung cancer, as a macrophage activator that acts through TLR2 and its coreceptors TLR6 and CD14. By activating TLR2:TLR6 complexes and inducing TNF-alpha secretion by myeloid cells, versican strongly enhances LLC metastatic growth.

### Overview

Product Name	Anti-Versican/VCAN Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Versican/VCAN Antibody Picoband® catalog # PB9453. Tested in IHC, 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	IHC, 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> . *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	P13611

### Technical Details

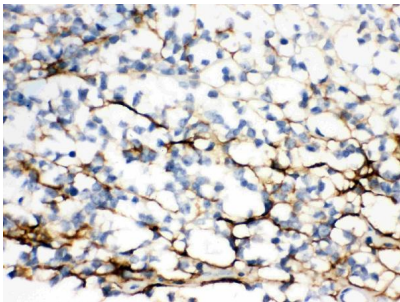
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Versican, different from the related mouse and rat sequences by two amino acids.
-----------	---

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).
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	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human Western blot, 0.1-0.5ug/ml, Mouse, Rat, Human

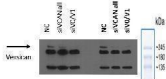
## Anti-Versican/VCAN Antibody Picoband® (PB9453) Images



Western blot analysis of Vitronectin using anti-Vitronectin antibody (PB9453). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: Rat Brain Tissue Lysate at 50ug, Lane 2: HEPA Whole Cell Lysate at 40ug. 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-Vitronectin antigen affinity purified polyclonal antibody (Catalog # PB9453) 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 Vitronectin at approximately 373 kDa. The expected band size for Vitronectin is at 373 kDa.



IHC analysis of Vitronectin using anti-Vitronectin antibody (PB9453). Vitronectin was detected in a paraffin-embedded section of human glioma 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-Vitronectin Antibody (PB9453) 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 Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



Western blot analysis of versican/VCAN using anti-versican/VCAN Antibody (PB9453). 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. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% milk with TBST for 1.5 hour at RT. The membrane was incubated with rabbit anti-versican/VCAN Antibody (PB9453) at 1: 500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with an anti-rabbit 1 hour at room temperature. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for versican/VCAN at approximately 245 kDa. The expected band size for versican/VCAN is at 373 kDa.

## 5 Publications Citing This Product

2. PubMed ID: 10.1158/0008-5472.CAN-17-3014, miR-590-3p Promotes Ovarian Cancer Growth and Metastasis via a Novel FOXA2–Versican Pathway

3. PubMed ID: 32746997, Liu G,Bai L,Li S,Liu H,Zhu Y,Sun H,Gao S,Jiang W,Li F.Isolation, culture and growth characteristics of dermal papilla cells from Rex rabbits. Tissue Cell. 2020 Aug;65:101348.doi: 10.1016/j.tice.2020.101348.Epub 2020 Feb 27.PMID: 32746997.

Visit [bosterbio.com/anti-versican-picoband-trade-antibody-pb9453-boster.html](https://bosterbio.com/anti-versican-picoband-trade-antibody-pb9453-boster.html) to see all 5 publications.

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Versican/VCAN Antibody

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