

Anti-Canstatin Antibody Picoband®

Catalog Number: PA1521

About COL4A2

Canstatin, a cleavage product corresponding to the collagen alpha 2 (IV) NC1 domain, possesses both anti-angiogenic and anti-tumor cell activity. It inhibits proliferation and migration of endothelial cells, reduces mitochondrial membrane potential, and induces apoptosis. Specifically induces Fas-dependent apoptosis and activates procaspase-8 and -9 activity. Ligand for alphavbeta3 and alphavbeta5 integrins.

Overview

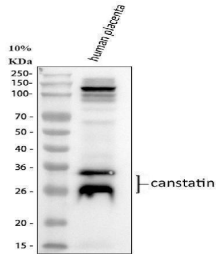
Product Name	Anti-Canstatin Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-Canstatin Antibody catalog # PA1521. Tested in IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg 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	P08572

Technical Details

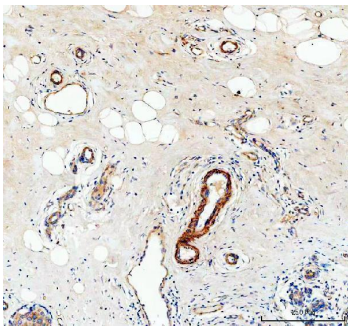
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Canstatin, identical to the related rat and mouse sequences.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit 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	Western blot, 0.1-0.5ug/ml, Human Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human

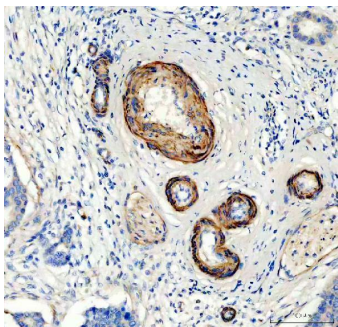
Anti-Canstatin Antibody Picoband® (PA1521) Images



Western blot analysis of Canstatin using anti-Canstatin antibody (PA1521). 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: human placenta tissue 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-Canstatin antigen affinity purified polyclonal antibody (Catalog # PA1521) at 0.25 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 Canstatin at approximately 24-35 kDa. The expected band size for Canstatin is at 24 kDa.

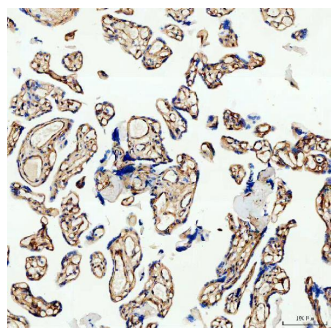


IHC analysis of Canstatin using anti-Canstatin antibody (PA1521). Canstatin was detected in a paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Canstatin Antibody (PA1521) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



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15 Publications Citing This Product

1. PubMed ID: 32307498, Qi MY,Wang XT,Xu HL,Yang ZL,Cheng Y,Zhou B.Protective effect of ferulic acid on STZ-induced diabetic nephropathy in rats.Food Funct.2020 Apr 1;11(4):3706-3718.doi:10.1039/c9fo02398d.Epub 2020 Apr 20. PMID:32307498.
2. PubMed ID: 32947968, Sugiyama A,Kaisho M,Okada M,Otani K,Yamawaki H.Decreased Expression of Canstatin in Rat Model of Monocrotaline-Induced Pulmonary Arterial Hypertension:Protective Effect of Canstatin on Right Ventricular Remodeling.Int J Mol Sci.2020 Sep 16;21(18):6797.doi
3. PubMed ID: 23856441, Xu L, Zheng N, He Q, Li R, Zhang K, Liang T. Phytomedicine. 2013 Oct 15;20(13):1172-9. Doi: 10.1016/J.Phymed.2013.06.008. Epub 2013 Jul 13. Puerarin, Isolated From Pueraria Lobata (Willd.), Protects Against Hepatotoxicity Via Specific Inhibition O...

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Anti-Canstatin Antibody

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