

Anti-Canstatin Antibody

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

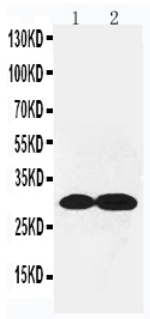
Product Name	Anti-Canstatin Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Canstatin Antibody catalog # PA1521. Tested in IF, IHC, IHC-F, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IF, IHC, IHC-F, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
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

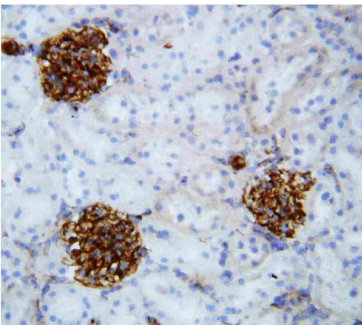
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Canstatin, identical to the related rat and mouse sequences.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P), IHC(F) 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	<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:</p> <p>Western blot, 0.1-0.5ug/ml, Human, Rat</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat</p> <p>Immunohistochemistry (Frozen Section), 0.5-1ug/ml, Mouse, Rat</p> <p>Immunocytochemistry/Immunofluorescence, 2ug/ml, Human</p>

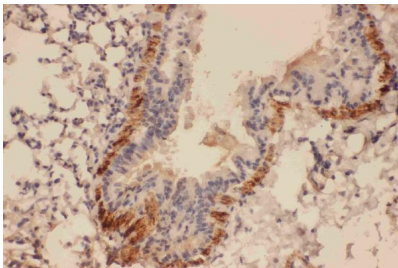
Anti-Canstatin Antibody (PA1521) Images



Anti-Canstatin antibody, PA1521, Western blotting
Lane 1: Rat Kidney Tissue Lysate
Lane 2: Rat Lung Tissue Lysate



Anti-Canstatin antibody, PA1521, IHC(F)
IHC(F): Rat Kidney Tissue



Anti-Canstatin antibody, PA1521, IHC(P)
IHC(P): Mouse Lung Tissue

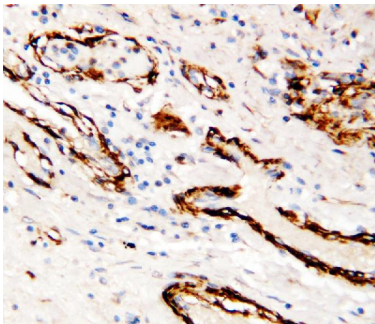
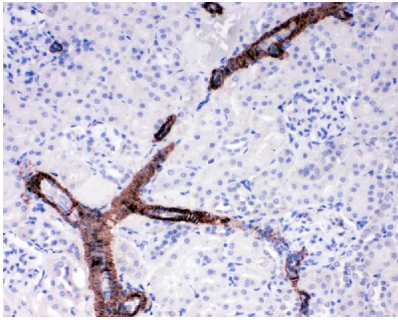


Figure 4. IHC analysis of Canstatin using anti-Canstatin antibody (PA1521).
Canstatin was detected in paraffin-embedded section of human mammary cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Canstatin Antibody (PA1521) 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.

Figure 5. IHC analysis of Canstatin using anti-Canstatin antibody (PA1521).
Canstatin was detected in paraffin-embedded section of rat kidney tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat



serum. The tissue section was then incubated with 1ug/ml rabbit anti-Canstatin Antibody (PA1521) 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.

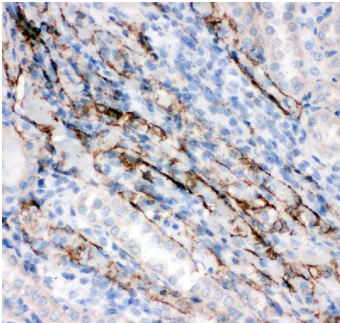


Figure 6. IHC analysis of Canstatin using anti-Canstatin antibody (PA1521).

Canstatin was detected in paraffin-embedded section of rat kidney tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Canstatin Antibody (PA1521) 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.

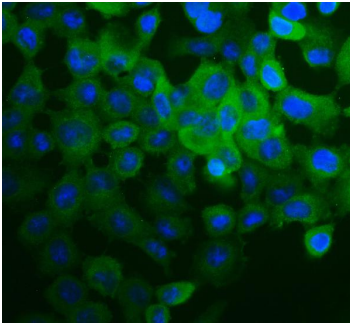


Figure 7. IF analysis of Canstatin using anti-Canstatin antibody (PA1521).

Canstatin was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-Canstatin Antibody (PA1521) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) 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.

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.Phyomed.2013.06.008. Epub 2013 Jul 13. Puerarin, Isolated From Pueraria Lobata (Willd.), Protects Against Hepatotoxicity Via Specific Inhibition O...

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