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antibody and ELISA experts

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Anti-VEGF/VEGFA Antibody Picoband™

Catalog Number: PB9071

About VEGFA

VEGF, a homodimeric glycoprotein of relative molecular mass 45,000, is the only mitogen that specifically acts on endothelial cells. It may be a major regulator of tumor angiogenesis in vivo. It is, however, structurally related to platelet-derived growth factor. VEGF shares homology with the PDGF A chain and B chain, including conservation of all 8 cysteines found in PDGFA and PDGFB. VEGF gene contains 8 exons. VEGF induces remodeling and enhances TH2-mediated sensitization and inflammation in the lung. And this gene also can regulate haematopoietic stem cell survival by an internal autocrine loop mechanism. What's more, it also stimulates neurogenesis in vitro and in vivo.

Overview

Product Name	Anti-VEGF/VEGFA Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-VEGF/VEGFA Antibody Picoband™ catalog # PB9071. Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 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	P15692

Technical Details

Immunogen	E.coli-derived human VEGF recombinant protein (Position: A27-R191). Human VEGF shares 78% amino acid (aa) sequence identity with both mouse and rat VEGF.
Predicted Reactive Species	Bovine, Canine, Monkey, Rabbit
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.

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Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat, By Heat Flow Cytometry, 1-3ug/1x10^6 cells, Human

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Anti-VEGF/VEGFA Antibody Picoband™ (PB9071) Images

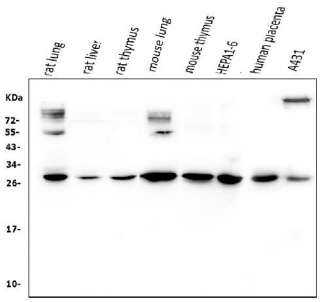

Figure 1. Western blot analysis of VEGF using anti-VEGF antibody (PB9071).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: rat lung tissue lysate,
Lane 2: rat lver tissue lysate,
Lane 3: rat thymus tissue lysate,
Lane 4: mouse lung tissue lysate,
Lane 5: mouse thymus tissue lysate,
Lane 6: HEPA1-6 whole cell lysate,
Lane 7: human placenta tissue lysate,
Lane 8: A431 whole cell lysate,
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-VEGF antigen affinity purified polyclonal antibody (Catalog # PB9071) 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 VEGF at approximately 27KD. The expected band size for VEGF is at 27KD.

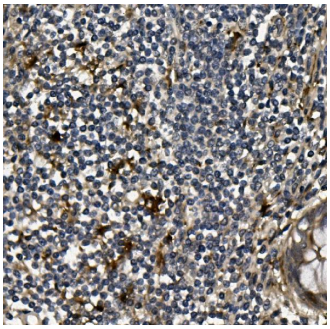

Figure 2. IHC analysis of VEGF using anti-VEGF antibody (PB9071).
VEGF was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-VEGF Antibody (PB9071) 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.

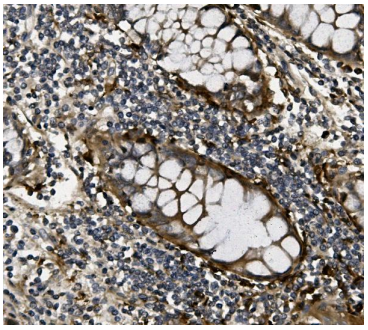

Figure 3. IHC analysis of VEGF using anti-VEGF antibody (PB9071).
VEGF was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-VEGF Antibody (PB9071) 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.

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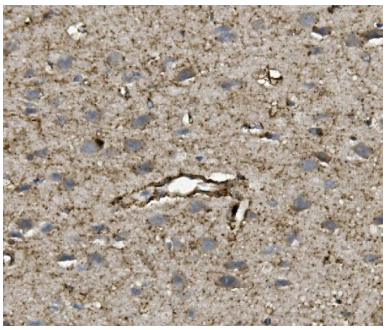

Figure 4. IHC analysis of VEGF using anti-VEGF antibody (PB9071).
VEGF was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-VEGF Antibody (PB9071) 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.

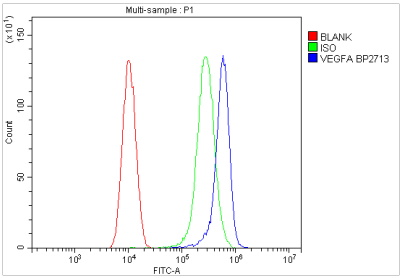

Figure 5. Flow Cytometry analysis of SiHa cells using anti-VEGF antibody (PB9071).
Overlay histogram showing SiHa cells stained with PB9071 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-VEGF Antibody (PB9071, 1ug/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

118 Publications Citing This Product

1. PubMed ID: 10.4081/ejh.2009.e7, Induction stage-dependent expression of vascular endothelial growth factor and aquaporin-1 in diethylstilbestrol-treated rat pituitary

2. PubMed ID: 10.4103/1673-5374.179055, Buyanghuanwu decoction promotes angiogenesis after cerebral ischemia/reperfusion injury: mechanisms of brain tissue repair

3. PubMed ID: 10.2353/ajpath.2009.080846, Decreased TIP30 Expression Promotes Tumor Metastasis in Lung Cancer

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