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antibody and ELISA experts

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Anti-VEGF Receptor 1/FLT1 Antibody Picoband™

Catalog Number: A00534

About FLT1

Vascular endothelial growth factor receptor 1 (FLT1) is a protein that in humans is encoded by the FLT1 gene. Oncogene FLT belongs to the src gene family. It is mapped to 13q12. The deduced 1,338-amino acid protein has a calculated molecular mass of 150.6 kD. It has a 758-amino acid extracellular domain, followed by a 22-amino acid transmembrane region and a 558-amino acid cytoplasmic region containing a cluster of basic amino acids and a tyrosine kinase domain. sFLT-1 was identified in placenta, adult lung, kidney, liver and uterus. Like other members of this family, it shows tyrosine protein kinase activity that is important for the control of cell proliferation and differentiation.

Overview

Product Name	Anti-VEGF Receptor 1/FLT1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-VEGF Receptor 1/FLT1 Antibody Picoband™ catalog # A00534. Tested in ELISA, Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, Flow Cytometry, IF, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg NaN_3.
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	P17948

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human VEGF Receptor 1, identical to the related mouse and rat sequences.
Predicted Reactive Species	Chicken
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 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.

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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 Immunocytochemistry/Immunofluorescence, 2ug/ml Flow Cytometry, 1-3ug/1x10^6 cells ELISA (Cap), 1-5ug/ml

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Anti-VEGF Receptor 1/FLT1 Antibody Picoband™ (A00534) Images

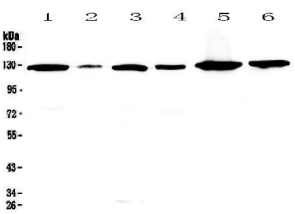

Figure 1. Western blot analysis of VEGF Receptor 1 using anti-VEGF Receptor 1 antibody (A00534).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human Hela cell lysate,
Lane 2: human placenta tissue lysate,
Lane 3: human A549 cell lysate,
Lane 4: human COLO-320 cell lysate,
Lane 5: Human A431 cell lysate,
Lane 6: human SK-OV-3 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 Receptor 1 antigen affinity purified polyclonal antibody (Catalog # A00534) 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 Receptor 1 at approximately 125KD. The expected band size for VEGF Receptor 1 is at 150KD.

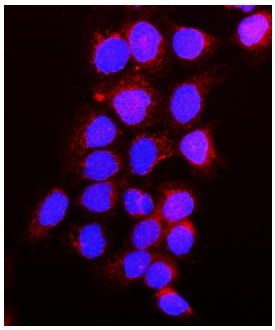

Figure 2. IF analysis of VEGF Receptor 1/FLT1 using anti-VEGF Receptor 1/FLT1 antibody (A00534).
VEGF Receptor 1/FLT1 was detected in immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-VEGF Receptor 1/FLT1 Antibody (A00534) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) 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.

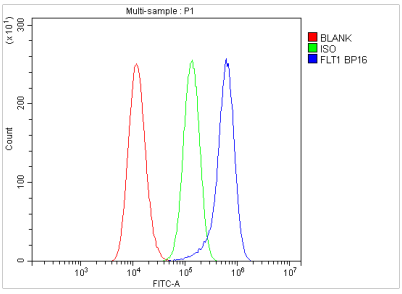

Figure 3. Flow Cytometry analysis of A549 cells using anti-VEGF Receptor 1/FLT1 antibody (A00534).
Overlay histogram showing A549 cells stained with A00534 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-VEGF RECEPTOR 1/FLT1 Antibody (A00534, 1ug/1x10^6 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.

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3 Publications Citing This Product

1. PubMed ID: 10.1016/j.jvs.2010.08.020, The impact of vascular endothelial growth factor-transfected human endothelial cells on endothelialization and restenosis of stainless steel stents

2. PubMed ID: 23671638, Wu Y, You H, Ma P, Li L, Yuan Y, Li J, Ye X, Liu X, Yao H, Chen R, Lai K, Yang X. Plos One. 2013 May 9;8(5):E62827. Doi: 10.1371/Journal.Pone.0062827. Print 2013. Role Of Transient Receptor Potential Ion Channels And Evoked Levels Of Neuropeptides...

3. PubMed ID: 27216943, A novel polysaccharide from Sargassum integerrimum induces apoptosis in A549 cells and prevents angiogensis in vitro and in vivo

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