

VEGF-C Rabbit pAb

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Catalog # AP52239

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P49767
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46883
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human VEGF-C
Epitope Specificity	321-415/415
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Vascular endothelial growth factors (VEGFs), also known as vasculotropins, are a family of closely related growth factors having a conserved pattern of eight cysteine residues and sharing common VEGF receptors. VEGFs stimulate the proliferation of endothelial cells, induce angiogenesis, promote cell migration, increase vascular permeability, and inhibit apoptosis. The mitogenic activity of VEGFs appears to be mediated by specific VEGF receptors. The target cell specificity of VEGF is restricted to vascular endothelial cells. Vascular Endothelial Growth Factor C (VEGFC) is a member of the VEGF subfamily of PDGF-related growth factors. It is the ligand for Flt4 (VEGFR3) and KDR (VEGFR2). VEGFC binds Flt4 and induces tyrosine autophosphorylation of VEGFR3 and VEGFR2. VEGFC also stimulates the migration of bovine capillary endothelial cells in collagen gel. It is a specific growth factor for the lymphatic vascular system and mediates lymphangiogenesis. VEGFC is abundantly expressed in heart and skeletal muscle. Other tissues such as lung and kidney also express VEGFC.

Additional Information

Gene ID	7424
Other Names	Vascular endothelial growth factor C, VEGF-C, Flt4 ligand, Flt4-L, Vascular endothelial growth factor-related protein, VRP, VEGFC
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1ug/Test

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name

VEGFC

Function

Growth factor active in angiogenesis, and endothelial cell growth, stimulating their proliferation and migration and also has effects on the permeability of blood vessels. May function in angiogenesis of the venous and lymphatic vascular systems during embryogenesis, and also in the maintenance of differentiated lymphatic endothelium in adults. Binds and activates KDR/VEGFR2 and FLT4/VEGFR3 receptors.

Cellular Location

Secreted.

Tissue Location

Expressed in the spleen (PubMed:8700872, PubMed:9247316). Expressed in the lymph node, thymus, appendix and bone marrow (PubMed:9247316). Expressed in the heart, placenta, skeletal muscle, ovary and small intestine (PubMed:8617204, PubMed:8700872) Expressed in the prostate, testis and colon (PubMed:8700872)

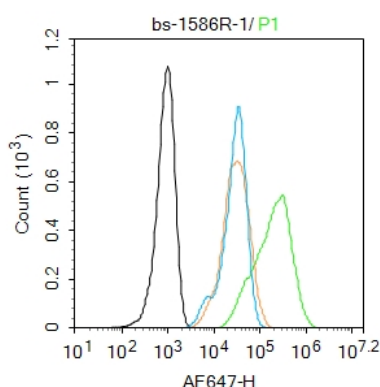
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References

Kukk E.,et al.Development 122:3829-3837(1996).
Fitz L.J.,et al.Oncogene 15:613-618(1997).
Wang Z.G.,et al.Biochem. J. 428:347-354(2010).
Carninci P.,et al.Science 309:1559-1563(2005).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

Images



Blank control: HepG2.

Primary Antibody (green line): Rabbit Anti-VEGF-C antibody (AP52239)

Dilution: 1 µg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

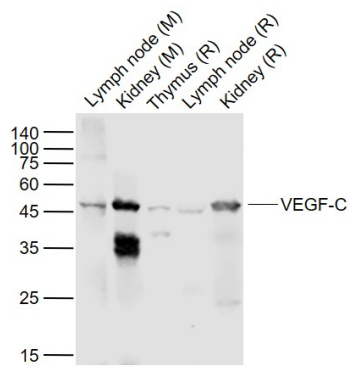
Secondary Antibody : Goat anti-rabbit IgG-AF647

Dilution: 1 µg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at

room temperature. Acquisition of 20,000 events was performed.



Sample:

Lane 1: Lymph node (Mouse) Lysate at 40 ug

Lane 2: Kidney (Mouse) Lysate at 40 ug

Lane 3: Thymus (Rat) Lysate at 40 ug

Lane 4: Lymph node (Rat) Lysate at 40 ug

Lane 5: Kidney (Rat) Lysate at 40 ug

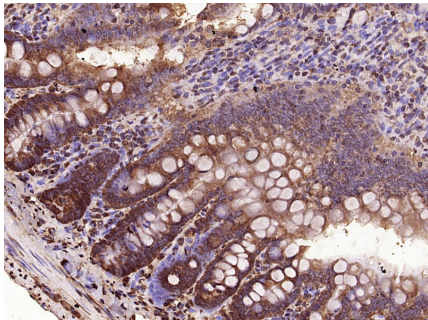
Primary:

Anti-VEGF-C (AP52239) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 46 kD

Observed band size: 46 kD



Paraformaldehyde-fixed, paraffin embedded (Rat small intestine); Antigen retrieval by microwave in sodium citrate buffer (pH6.0) ; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min; Antibody incubation with (VEGF-C) Polyclonal Antibody, Unconjugated (AP52239) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP) and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.