Data Sheet (Cat.No.TMAB-01954)

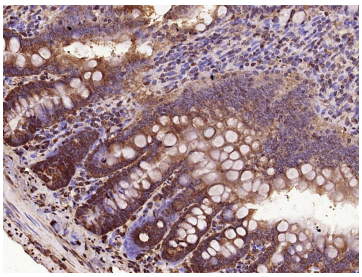
Anti-VEGFC Polyclonal Antibody

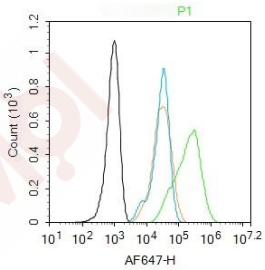
Product Details

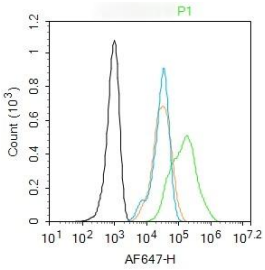
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Molecular Weight:	Theoretical: 46 kDa. Actual: 46 kDa.
Purification:	Protein A purified

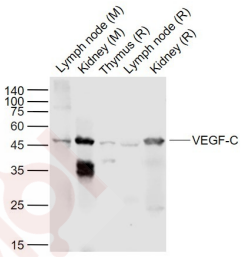
Applications

Verified Activity:	1. 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 30 min; Antibody incubation with (VEGF-C) Polyclonal Antibody, Unconjugated (TMAB-01954) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP) and DAB staining. 2. Blank control: HepG2. Primary Antibody (green line): Rabbit Anti-VEGF-C antibody (TMAB-01954) Dilution: 1 µg/10^6 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 (10 min 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. 3. Blank control: HepG2. Primary Antibody (green line): Rabbit Anti-VEGF-C antibody (TMAB-01954) Dilution: 1 µg/10^6 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 (10 min 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. 4. Sample: Lane 1: LympHnode (Mouse) Lysate at 40 µg Lane 2: Kidney (Mouse) Lysate at 40 µg Lane 3: Thymus (Rat) Lysate at 40 µg Lane 4: LympHnode (Rat) Lysate at 40 µg Lane 5: Kidney (Rat) Lysate at 40 µg Primary: Anti-VEGF-C (TMAB-01954) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 46 kDa Observed band size: 46 kDa









Application: FCM,IF,IHC-Fr,IHC-P,WB

Recommended: WB: 1:500-2000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500; FCM: 1ug/Test

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: KLH conjugated synthetic peptide: human VEGF-C

Antigen Species: Human

Gene ID: 7424

Uniprot ID: P49767

Synonyms: VEGF-C;Flt4-L;LMPH1D;vascular endothelial growth factor C;VRP

Biology Area: VEGF,Angiogenic growth factors,VEGF,Neurogenesis,VEGF

Research Background

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.