# Data Sheet (Cat.No.TMAB-14081)

TargetMol

## Anti-VEGF-C Polyclonal Antibody

### Product Details

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| Ig Type: | IgG |
| Reactivity: | Human,Mouse (predicted:Rat,Pig,Horse) |
| Molecular Weight: | Theoretical: 13/46 kDa. Actual: 13,46 kDa. |
| Purification: | Protein A purified |

### Applications

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| Verified Activity: | 1. Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (VEGF-C) Polyclonal Antibody, Unconjugated (TMAB-14081) at 1: 200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.<br>2. Paraformaldehyde-fixed, paraffin embedded (human gastric carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (VEGF-C) Polyclonal Antibody, Unconjugated (TMAB-14081) at 1: 200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.<br>3. Sample:<br>Lane 1: HUVEC (Human) Cell Lysate at 30 µg<br>Lane 2: K562 (Human) Cell Lysate at 30 µg<br>Lane 3: U251 (Human) Cell Lysate at 30 µg<br>Lane 4: HepG2 (Human) Cell Lysate at 30 µg<br>Lane 5: U2os (Human) Cell Lysate at 30 µg<br>Primary: Anti-VEGF-C (TMAB-14081) at 1/1000 dilution<br>Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution<br>Predicted band size: 46 kD<br>Observed band size: 45 kD<br>4. Paraformaldehyde-fixed, paraffin embedded (Human liver carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (VEGF-C) Polyclonal Antibody, Unconjugated (TMAB-14081) at 1:400 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.<br>5. Sample: Spleen (Mouse) Lysate at 40 µg<br>Primary: Anti-VEGF-C (TMAB-14081) at 1/300 dilution<br>Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution<br>Predicted band size: 13 kD<br>Observed band size: 13 kD<br>6. Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (VEGF-C) Polyclonal Antibody, Unconjugated (TMAB-14081) at 1:400 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB |

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| | staining. |
| Application: | WB,IHC-P,IHC-Fr,IF |
| Recommended | WB: 1:500-2000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500 |

## Properties

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| Stability & Storage: | Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. |
| Shipping: | Shipping with blue ice. |

## Antigen Details

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| Immunogen: | KLH conjugated synthetic peptide: human VEGF-C |
| Antigen Species: | Human |
| Gene ID: | 7424 |
| Uniprot ID: | P49767 |

## 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.