



Anti-human VEGF-C (#9E7)

20160623BB

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	101-M90
Size:	100 µg
Lot. No.:	According to product label
Country of origin:	Germany

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with recombinant human VEGF-C.

Target Background

Synonyms:	VRP, FLT4-L, VEGF-related protein
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VEGF-C, also known as Vascular Endothelial Growth Factor Related Protein (VRP), is a recently discovered VEGF growth factor family member that is most closely related to VEGF-D. The human VEGF-C cDNA encodes a pre-pro-protein of 416 amino acids residues. It is almost identical to the mouse VEGF-C protein. Similar to VEGF-D, VEGF-C has a VEGF homology domain spanning the middle third of the precursor molecule and long N- and C-terminal extensions. In adults, VEGF-C is highly expressed in heart, placenta, ovary and small intestine. Recombinant human VEGF-C, lacking the N- and C-terminal extensions and containing only the middle VEGF homology domain, forms primarily non-covalently linked dimers. This protein is a ligand for both VEGFR-2/KDR and VEGFR-3/FLT-4. Since VEGFR-3 is strongly expressed in lymphatic endothelial cells, it has been postulated that VEGF-C is involved in the regulation of the growth and/or differentiation of lymphatic endothelium. Although recombinant human VEGF-C is also a mitogen for vascular endothelial cells, it is much less potent than VEGF-A. The recombinant human VEGF-C contains 115 amino acids residues and was fused to a His-tag (6x His) at the C-terminal end. As a result of glycosylation VEGF-C migrates as an 18-24 kDa protein in SDS-PAGE under reducing conditions.

References

1. Joukov et al., EMBO J 15:290, 1996
2. Olofsson et al., Curr Opin Biotech 10:528, 1999
3. Kukk et al., Development 122:3829, 1996

Database References Antigen

Protein RefSeq:	NP_005420.1
Uniprot ID:	P49767
mRNA RefSeq:	NM_005429.2

Product Specifications

Species reactivity	human
Clone/Ab feature	IgG _{2a} ; #9E7
Cross reactivity	ND
Host	mouse
Clonality	monoclonal
Purification	Protein G purified
Immunogen	recombinant human VEGF-C (RT# 300-079)
Formulation	lyophilized
Buffer	PBS

Stability: The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

Western Blot: Use at 1-5 µg/ml
IF/IHC: Use at 2-10µg/ml

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



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Handling/Applications

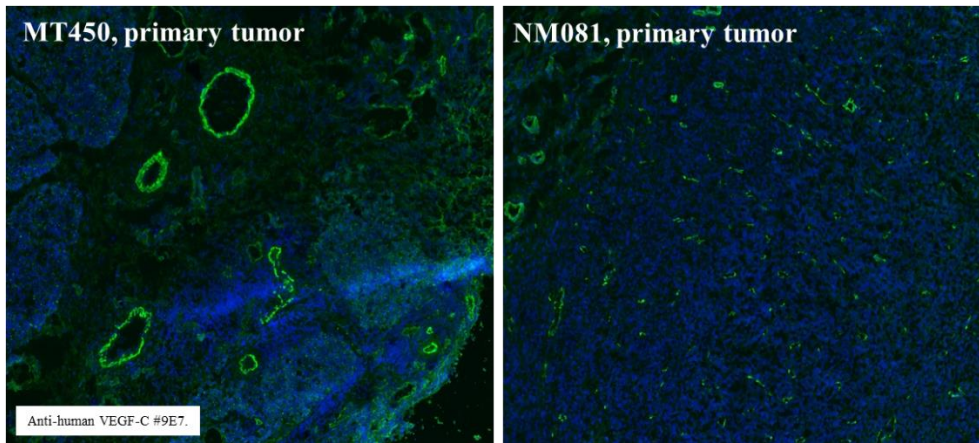


Figure 1: Staining of VEGF-C on cryo sections (acetone-fixed) of rat mammary tumors.

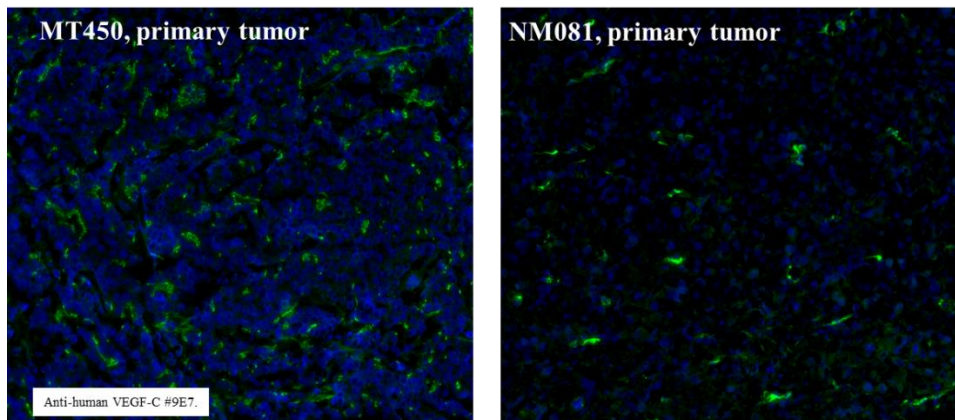


Figure 1: Staining of VEGF-C on cryo sections (unfixed) of rat mammary tumors.

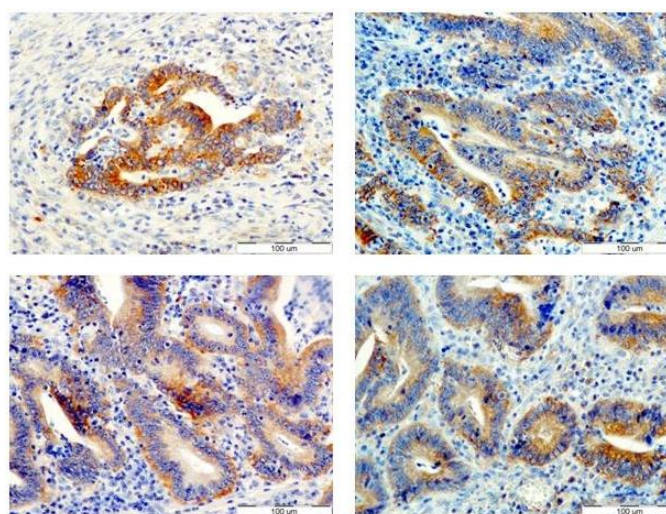


Figure 3: IHC with paraffin-embedded sections of human colon carcinoma tissue. Wroclaw Medical University Department of Histology and Embryology.