Qty: 100 µg/400 µl

Rabbit anti-
VEGF-C (Propeptide)

Catalog No. 34-4300

Lot No. See product label

Rabbit anti-VEGF-C (Propeptide)

FORM
This polyclonal antibody is supplied as a 400 µl aliquot at a concentration of 0.25 mg/ml in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. The antibody is epitope-affinity-purified from rabbit antiserum.

PAD: ZMD.83

IMMUNOGEN
A synthetic peptide derived from the C-terminal sequence of propeptide form of VEGF-C.

SPECIFICITY
This antibody reacts specifically with human VEGF-C propeptide and is therefore unable to recognize the mature form of VEGF-C.

REACTIVITY
Reactivity is confirmed with U937 lymphoma cell lysate.

Sample	Western Blotting	ELISA
Human	+++	NA
Immunogen	NA	+++

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable NA)

USAGE
Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.1-1.0 µg/ml
Western Blotting: 2-5 µg/ml

STORAGE
Store at 2-8°C for up to one month. Store at –20°C for long term storage. Avoid repeated freezing and thawing.

(cont'd)

BACKGROUND

Vascular endothelial growth factors (VEGF) are structurally and functionally related growth factors, that may play important roles in the formation of vascular systems during embryonic development, in regulation of capillary growth in adults, and in maintenance of normal vasculature. VEGF-C is a ligand for receptor tyrosine kinase VEGFR-3 (Flt-4), which is mainly expressed in the endothelium of lymphatic vessels.[2] VEGF-C mRNA has been detected in human heart, lung, muscle, ovary, placenta, and small intestine.[3] It is also detected in many malignant tumors, including breast carcinomas, squamous cell carcinomas, lymphomas, melanomas, sarcomas and ademomas. [2,4] VEGF-C is synthesized as a precursor protein called prepropeptide, which undergoes a series of proteolytic steps to give the mature form of VEGF-C.[5] The prepropeptide is cleaved and forms a homo-dimer between two identical propeptides.[6] This dimer is then processed to form a secretable tetramer that consists of two 29 kDa and two 31 kDa peptides, which is then secreted extracellularly and processed to produce the mature form that consists of two 21 kDa peptides.[5,6] Studies suggest the 29/31 kDa form is the most prevalent form of VEGF-C in many biological systems.[5]

REFERENCES

1. Li X *et al. Proc Natl Acad Sci*. 95(24): 14389-94 (2001).
2. Salven P *et al. Am J Pathol* 153(1): 103-8 (1998).
3. Partanen TA *et al*. *Faseb J.* 14(13): 2087-96 (2000).
4. Valtola R *et al*. *Am J Pathol.* 154(5): 1381-90 (1999).
5. Olofsson J *et al. Cell Struct. Funct.* 21:381-385 (1999).
6. Joukov V *et al. Embo J.* 16(13): 3898-911 (1997).

RELATED PRODUCTS

Product	***Clone/PAD****	***Cat. No.***
Rabbit anti-VEGF-C	Z-CVC7	18-2255
Rabbit anti-VEGF	Z-CVF3	18-0254
Rabbit anti-VEGI	ZMD-58	34-3900
Rabbit anti-Angiopoietin 2	NE2	51-4100
PolyFast™ Rb x Neuropilin-1 + Peptide	Z-CN1	52-0107
PolyFast™ Rb x Neuropilin-2 + Peptide	Z-CN2	52-0207
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

*PAD: Polyclonal Antibody Designation

Conjugate	**ZyMAX™ Goat x Rabbit IgG (H+L)**	**ZyMAX™ Goat x Mouse IgG (H+L)**
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

For Research Use Only