



Anti-rat Vascular Endothelial Growth Factor-D



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	104-PA12S
Size:	100 µg
Lot. No.:	According to product label
Country of origin:	Germany

Preparation: Produced from sera of rabbits pre-immunized with a N-terminal peptide of rat dNdc-VEGF-D.

Target Background

Synonyms:	c-Fos-induced growth factor, Figf
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VEGF-D, a member of the VEGF/PDGF family of structurally related proteins, is a potent angiogenic cytokine. It promotes endothelial cell growth, promotes lymph angiogenesis, and can also affect vascular permeability. VEGF-D is highly expressed in the lung, heart, small intestine and fetal lung, and at lower levels in the skeletal muscle, colon, and pancreas. It forms cell surfaced-associated non-covalent disulfide linked homodimers, and can bind and activate both VEGFR-2 (flk1) and VEGFR-3 (flt4) receptors. During embryogenesis, VEGF-D may play a role in the formation of the venous and lymphatic vascular systems. It also participates in the growth and maintenance of differentiated lymphatic endothelium in adults. Both VEGF-C and VEGF-D are over-expressed in certain cancers, and the resulting elevated levels of VEGF-C or VEGF-D tend to correlate with increased lymphatic metastasis. Recombinant human VEGF-D is a 13.1 kDa non-disulfide linked homodimeric protein consisting of two 117 amino acid polypeptide chains. Due to glycosylation the protein migrates as a 20.0-22.0 kDa band under non-reducing condition.

References

1. Orlandini, M. et al. (1996) Proc. Natl. Acad. Sci. USA 93:11675.
2. Stacker, S.A. et al. (1999) J. Biol. Chem. 274:32127.
3. McColl, B.K. et al. (2007) FASEB J. 21:1088.
4. Baldwin, M.E. et al. (2001) J. Biol. Chem. 276:44307.
5. Baldwin, M.E. et al. (2001) J. Biol. Chem. 276:19166.
6. Karpanen, T. et al. (2006) Am. J. Pathol. 169:708.
7. Orlandini, M. et al. (2006) J. Biol. Chem. 281:17961.
8. Stacker, S.A. et al. (2001) Nature Med. 7:186.
9. Karpanen, T. et al. (2006) FASEB J. 20:1462.

Database References Antigen

Protein RefSeq:	NP_113949.1
Uniprot ID:	O35251
mRNA RefSeq:	NM_0371761.1

Product Specifications

Species reactivity	Rat
Clone/Ab feature	Rabbit IgG
Cross reactivity	ND
Host	rabbit
Clonality	polyclonal
Purification	Protein A purified
Immunogen	N-terminal peptide
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 2-5 µg/ml
ELISA:	Use at 2-5 µg/ml

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



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Handling/Applications