Vascular Endothelial Growth Factor (VEGF) Ab-1
Rabbit Polyclonal Antibody
Cat. #RB-222-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 1.0mg/ml) (Purified Ab with BSA and Azide)
Cat.#RB-222-R7 (7.0ml) (Ready-to-Use for Immunohistochemical Staining)

**Description:** VEGF (vascular endothelial growth factor) is a homodimeric, disulfide-linked glycoprotein involved in angiogenesis which promotes tumor progression and metastasis. It exhibits potent mitogenic and permeability inducing properties specific for the vascular endothelium. Of the four isoforms of VEGF, the smaller two, VEGF165 and VEGF121, are secreted proteins and act as diffusible agents, whereas the larger two (VEGF189 and VEGF206) remain cell associated.

Mol. Wt. of Antigen: 19-22kDa (reduced)

Epitope: Not determined

Species Reactivity: Human, Mouse, and Rat. Others-not known.

Immunogen: Human recombinant VEGF165

Applications and Suggested Dilutions:
- Immunohistology (Formalin/paraffin)
  - (Ab 5-10µg/ml for 30 min at RT)
  - * (Staining of formalin-fixed tissues REQUIRES boiling tissue sections in 1mM EDTA, pH 8.0 (Cat. #AP-9004), for 10-20 min followed by cooling at RT for 20 min.)

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: Angiosarcoma

Cellular Localization: Cytoplasmic, cell surface, and extracellular matrix

Supplied As:
IgG purified from rabbit anti-serum by Protein A chromatography. Prepared at 1mg/ml in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide.

Storage and Stability: Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Suggested References:
2. Boocock CA; et al. Journal of the National Cancer Institute, 1995 Apr 5, 87(7):506-16.

Limitations and Warranty:
Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:
This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only
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Additional Suggested References:


2. Brown LF; Obricht SM; Berse B; Jackman RW; Matsueda G; Tognazzi KA; Manseau EJ; Dvorak HF; Van de Water L. Overexpression of vascular permeability factor (VPF/VEGF) and its endothelial cell receptors in delayed hypersensitivity skin reactions. J of Immunology, 1995, 154:2801-7.

3. Claffey KP; Senger DR; Spiegelman BM. Structural requirements for dimerization, glycosylation, secretion, and biological function of VPF/VEGF. Biochimica et Biophysica Acta, 1995 Jan 5, 1246(1-9).


17. Stavrri GT; Hong Y; Zachary IC; Breier G; Baskerville PA; Yla-Herttuala S; Risau W; Martin JF; Erusalimsky JD. Hypoxia and platelet-derived growth factor-BB synergistically upregulate the expression of vascular endothelial growth factor in vascular smooth muscle cells. Fabs Letters, 1995 Jan 30, 358(3):311-5.

18. Takahashi T; Shirasawa T; Miyake K; Yahagi Y; Maruyama Y; Kasahara N; Kawamura T; Matsuruma O; Mitarai T; Sakai O. Protein tyrosine kinases expressed in glomeruli and cultured glomerular cells: Flt-1 and VEGF expression in renal mesangial cells. Biochemical and Biophysical Research Communications, 1995 Apr 6, 209(1):218-26.


20. Aiello LP; Avery RL; Arrigg PG; Keyt BA; Jampel HD; Shah ST; Pasquale LR; Thieme H; Iwamoto MA; Park JE; et al. Vascular endothelial growth factor in ocular fluid of patients with diabetic retinopathy and other retinal disorders [see comments]. New England Journal of Medicine, 1994 Dec 1, 331(22):1480-7.


22. Fava RA; Olsen NJ; Spencer-Green G; Yeo KT; Yeo TK; Berse RW; Berse B; Tognazzi K; Dvorak HF; Detmar M. Increased expression of microvascular hyperpermeability factor/endothelial growth factor expression by hypoxia and by glucose deficiency in multicell spheroids: implications for tumor angiogenesis. Proceedings of the National Academy of Sciences of the United States of America, 1995 Jan 31, 92(3):905-9.

23. Fava RA; Olsen NJ; Spencer-Green G; Yeo KT; Yeo TK; Berse B; Jackman RW; Senger DR; Dvorak HF; Brown LF. Vascular permeability factor/endothelial growth factor (VPF/VEGF): accumulation and expression in human synovial fluids and rheumatoid synovial tissue. Journal of Experimental Medicine, 1994 Jul 1, 58(1):341-6.