

DATA SHEET

Vascular Endothelial Growth Factor (VEGF) Ab-3 (JH121)

Mouse Monoclonal Antibody

Cat. #DLN-09081, -09082, or -09080 (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified with BSA and Azide) Cat. #DLN-09083 or -09084 (0.1ml or 0.2ml at 1.0mg/ml) (Purified without BSA and Azide)

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.

Comments: Ab-3 is excellent for neutralizing the bioactivity of human VEGF.

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

Epitope: Not determined

Species Reactivity: Human, Rabbit. Others-not known.

Clone Designation: JH121

Ig Isotype / Light Chain: IgG_1/κ

Immunogen: Recombinant human VEGF₁₂₁

Applications and Suggested Dilutions:

 Neutralizes Bioactivity of VEGF (Order Ab without sodium azide)

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:

200µg/ml of antibody purified from ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml

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.

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Suggested References:

- 1. Boocock CA; et al. Journal of the National Cancer Institute, 1995 Apr 5, 87(7):506-16.
- 2. Brown LF; et al. Human Pathology, 1995 Jan, 26(1):86-91.

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. Dianova 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:

- Brown LF; Harrist TJ; Yeo KT; Stahle-Backdahl M; Jackman RW; Berse B; Tognazzi K; Dvorak HF; Detmar M. Increased expression of vascular permeability factor (vascular endothelial growth factor) in bullous pemphigoid, dermatitis herpetiformis, and erythema multiforme. Journal of Investigative Dermatology, 1995 May, 104(5):744-9.
- Brown LF; Olbricht 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):1-9.
- 4. Dvorak HF; Brown LF; Detmar M; Dvorak AM. Vascular permeability factor/vascular endothelial growth factor, microvascular hyperpermeability, and angiogenesis. American Journal of Pathology, 1995 May, 146(5):1029-39.
- Fischer S; Sharma HS; Karliczek GF; Schaper W. Expression of vascular permeability factor/vascular endothelial growth factor in pig cerebral microvascular endothelial cells and its upregulation by adenosine. Brain Research. Molecular Brain Research, 1995 Jan, 28(1):141-8.
- 6. Frank S; Hubner G; Breier G; Longaker MT; Greenhalgh DG; Werner S. Regulation of vascular endothelial growth factor expression in cultured keratinocytes. Implications for normal and impaired wound healing. Journal of Biological Chemistry, 1995 May 26, 270(21):12607-13.
- 7. Hatva E; Kaipainen A; Mentula P; Jaaskelainen J; Paetau A; Haltia M; Alitalo K. Expression of endothelial cell-specific receptor tyrosine kinases and growth factors in human brain tumors. American Journal of Pathology, 1995 Feb, 146(2):368-78.
- 8. Kamat BR; Brown LF; Manseau EJ; Senger DR; Dvorak HF. Expression of vascular permeability factor/vascular endothelial growth factor by human granulosa and theca lutein cells. Role in corpus luteum development. American Journal of Pathology, 1995 Jan, 146(1):157-65.
- 9. O'Brien T; Cranston D; Fuggle S; Bicknell R; Harris AL. Different angiogenic pathways characterize superficial and invasive bladder cancer. Cancer Research, 1995 Feb 1, 55(3):510-3.
- Ohsawa M; Naka N; Tomita Y; Kawamori D; Kanno H; Aozasa K. Use of immunohistochemical procedures in diagnosing angiosarcoma. Evaluation of 98 cases. Cancer, 1995 Jun 15, 75(12):2867-74.
- 11. Pierce EA; Avery RL; Foley ED; Aiello LP; Smith LE. Vascular endothelial growth factor/vascular permeability factor expression in a mouse model of retinal neovascularization. Proceedings of the National Academy of Sciences of the United States of America, 1995 Jan 31, 92(3):905-9.
- Qu-Hong; Nagy JA; Senger DR; Dvorak HF; Dvorak AM. Ultrastructural localization of vascular permeability factor/vascular endothelial growth factor (VPF/VEGF) to the abluminal plasma membrane and vesiculovacuolar organelles of tumor microvascular endothelium. Journal of Histochemistry and Cytochemistry, 1995, 43:381-9.
- 13. Samoto K; Ikezaki K; Ono M; Shono T; Kohno K; Kuwano M; Fukui M. Expression of vascular endothelial growth factor and its possible relation with neovascularization in human brain tumors. Cancer Research, 1995 Mar 1, 55(5):1189-93.
- 14. Sharma HS; Tang ZH; Gho BC; Verdouw PD. Nucleotide sequence and expression of the porcine vascular endothelial growth factor. Biochimica et Biophysica Acta, 1995 Jan 25, 1260(2):235-8.
- 15. Shweiki D; Neeman M; Itin A; Keshet E. Induction of vascular 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):768-72.
- 16. Simon M; Grone HJ; Johren O; Kullmer J; Plate KH; Risau W; Fuchs E. Expression of vascular endothelial growth factor and its receptors in human renal ontogenesis and in adult kidney. American Journal of Physiology, 1995 Feb, 268:F240-50.
- 17. Stavri GT; Hong Y; Zachary IC; Breier G; Baskerville PA; Yla-Herttuala S; Risau W; Martin JF; Erusalimsky JD. Hypoxia and plateletderived growth factor-BB synergistically upregulate the expression of vascular endothelial growth factor in vascular smooth muscle cells. Febs Letters, 1995 Jan 30, 358(3):311-5.
- Takahashi T; Shirasawa T; Miyake K; Yahagi Y; Maruyama N; Kasahara N; Kawamura T; Matsumura 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.
- 19. Tuder RM; Flook BE; Voelkel NF. Increased gene expression for VEGF and the VEGF receptors KDR/Flk and Flt in lungs exposed to acute or to chronic hypoxia. Modulation of gene expression by nitric oxide. Journal of Clinical Investigation, 1995 Apr, 95(4):1798-807.

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