

Code No. 18411

**Anti-Human
VEGF (V-N) Rabbit IgG Affinity Purify**

Volume : 100 µg

Introduction : Vascular Endothelial Cell Growth Factor (VEGF) is a homodimeric protein initially purified from media conditioned by normal bovine pituitary folliculo-stellate cells and secreted by a variety of vascularized tissues. It was subsequently found to be identical to a vascular permeability factor (VPF), which was previously identified in media conditioned by tumor cell lines based upon its ability to increase the permeability of capillary blood vessels. The reported activities of VEGF include stimulation of endothelial cell growth, angiogenesis and capillary permeability. Human VEGF is a 38.2 kDa homodimeric protein consisting of two 165 amino acid polypeptide chains. VEGF is expressed in many human tumor cells, including human adenocarcinoma, human pancreatic carcinoma, human hepatocellular carcinoma, renal cell carcinoma, fibrosarcoma, HL60 promyelocytic leukemia, GS-9L glioma and U937 lymphoma cells. In normal tissues, VEGF expression has been observed in activated macrophages, keratinocytes, hepatocytes, smooth muscle cells Leydig cells, embryonic fibroblasts and bronchial and choroids plexus epithelium, renal glomerular visceral epithelium and mesangial cells.

Antigen : Synthetic peptide of the N terminal part of Human VEGF

Purification : Purified with antigen peptide

Form : Lyophilized product from 1 % BSA in PBS containing 0.05% NaN₃

How to use : 1.0 mL deionized water will be added to the product (the conc. comes up 100 µg /mL)

Stability : Lyophilized product, 5 years at 2 - 8 °C
: Solution, 2 years at -20 °C

Application : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues after trypsin treatment by several techniques such as Avidin Biotin Complex (ABC) Method. The optimal concentration is about 2 - 5 µg/mL, however, the concentration should be optimized by each laboratory.
: This antibody can be used for western blotting in concentration of 2 - 5 µg /mL.

Specificity : Reacts with both of reduced form and non-reduced form.

Reference :

1. Suzuki H, Seto K, Shinoda Y, Mori M, Ishimura Y, Suematsu M, Ishii H. Paracrine upregulation of VEGF receptor mRNA in endothelial cells by hypoxia-exposed hep G2 cells. Am J Physiol. 1999 Jan; 276(1): G92-7.
2. Hayashi T, Abe K, Suzuki H, Itoyama Y. Rapid induction of vascular endothelial growth factor gene expression after transient middle cerebral artery occlusion in rats. Stroke. 1997 Oct; 28(10): 2039-44.
3. Torimura T, Sata M, Ueno T, Kin M, Tsuji R, Suzaku K, Hashimoto O, Sugawara H, Tanikawa K. Increased expression of vascular endothelial growth factor is associated with tumor progression in hepatocellular carcinoma. Hum Pathol. 1998 Sep; 29(9): 986-91.
4. Ogura Y. et al. [Immunohistochemical analysis of expression of angiogenic factors and tumor angiogenesis in superficial bladder cancer] in Japanese, Nippon Hinyokika Gakkai Zasshi 1998; 89(5), 529-37.
5. Koide N, Watanabe H, Yazawa K, Adachi W, Amano J. Immunohistochemical expression of thymidine phosphorylase/platelet-derived endothelial cell growth factor in squamous cell carcinoma of the esophagus. Hepatogastroenterology. 1999 Mar-Apr; 46(26): 944-51.
6. Fan L, Iseki S. Immunohistochemical localization of vascular endothelial growth factor in the endocrine glands of the rat. Arch Histol Cytol. 1998 Mar; 61(1): 17-28.

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