

VEGF (Vascular Endothelial Growth Factor) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM225] Catalog # AH12511

Product Information

ApplicationIHC, IFPrimary AccessionP15692Other Accession7422, 73793

Reactivity Human, Mouse, Rat, Rabbit, Dog

Host Mouse **Clonality** Monoclonal

Isotype Mouse / IgG1, kappa

Clone Names SPM225 Calculated MW 43597

Additional Information

Gene ID 7422

Other Names Vascular endothelial growth factor A, VEGF-A, Vascular permeability factor,

VPF, VEGFA, VEGF

Application Note IHC~~1:100~500 IF~~1:50~200

Storage Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions VEGF (Vascular Endothelial Growth Factor) Antibody - With BSA and Azide is

for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name VEGFA

Synonyms VEGF

Function [N-VEGF]: Participates in the induction of key genes involved in the response

to hypoxia and in the induction of angiogenesis such as HIF1A

(PubMed:35455969). Involved in protecting cells from hypoxia- mediated cell

death (By similarity).

Cellular Location [N-VEGF]: Cytoplasm. Nucleus. Note=Cytoplasmic in normoxic conditions and

localizes to the nucleus under hypoxic conditions [Isoform L-VEGF189]: Endoplasmic reticulum. Golgi apparatus. Secreted, extracellular space,

extracellular matrix [Isoform VEGF165]: Secreted

Higher expression in pituitary tumors than the pituitary gland. [Isoform VEGF165]: Widely expressed. [Isoform VEGF206]: Not widely expressed.

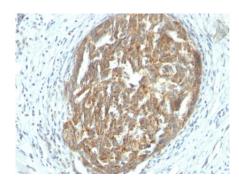
Background

This MAb recognizes proteins of 19-22kDa (reducing) and 38kDa-44kDa (non-reducing), identified as various isoforms of Vascular Endothelial Growth Factor or Vascular Permeability Factor (VEGF/VPF). It is highly specific to VEGF, which is a homodimeric, disulfide-linked glycoprotein with a close homology to platelet derived growth factor (PDGF). There are multiple isoforms of VEGF containing 206-, 189-, 165-, and 121-amino acid residues. The smaller two isoforms, VEGF165 and VEGF121, are secreted proteins and act as diffusible agents, whereas the larger two remain cell associated. VEGF/VPF plays an important role in angiogenesis, which promotes tumor progression and metastasis.

References

Tischer, E., et al. 1991. The human gene for vascular endothelial growth factor. Multiple protein forms are encoded through alternative exon splicing. J. Biol. Chem. 266: 11947-11954. | Berse, B., et al. 1992. Vascular permeability factor (vascular endothelial growth factor) gene is expressed differentially in normal tissues, macrophages and tumors. Mol. Biol. Cell 3: 211-220. | Folkman, J., et al. 1989. Induction of angiogenesis during the transition from hyperplasia to neoplasia. Nature 339: 58-61. |

Images



Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with VEGF Monoclonal Antibody (SPM225).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.